

TARGETING STRENGTHS AND ASSOCIATED TREATMENT OUTCOMES FOR YOUTH  
RECEIVING PUBLIC MENTAL HEALTH SERVICES

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## **Abstract**

Constructional approaches to clinical practice argue treatment should emphasize the enhancement of positive repertoires rather than primarily focus on the elimination of problematic behaviors. The movement away from a deficit-oriented model of mental health services to one that emphasizes strengths can have significant implications for treatment, particularly with youth. The literature on positive-oriented interventions suggests focusing on strengths (a) improves well-being, (b) reduces symptomology, and (c) is linked to positive outcomes. However, there is limited research on the use of strengths in youth clinical populations. The aim of the present study was to examine the extent of association, if any, between the targeting of strengths (including those of the client, the client's family, and the client's environment) and outcomes for 1,841 youth ages 3-19 receiving services through Hawai'i's public mental health system from 2006-2017. The study used archival data from a population of youth who received Intensive In-Home (IIH) treatment through Hawai'i State Child and Adolescent Mental Health Division (CAMHD). Therapist-reported treatment characteristics, therapist and client variables, and other outcome data were examined using multi-level modeling approaches. As hypothesized, greater use of strength-focused treatment targets (i.e., a greater proportion of strength-focused treatment targets endorsed) was associated with increased likelihood of successful treatment discharge. Specifically, as the percentage of strengths targeted increased from 46% to 64% of total targets endorsed, the odds of successful discharge increased by 21%. This finding persisted despite other significant predictors of successful discharge. Clinical practice, dissemination, implementation, and future research implications are discussed.

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## LIST OF INITIALISMS

CAFAS.....	Child and Adolescent Functional Assessment Scale
CAMHD.....	Child and Adolescent Mental Health Division
CAMHMIS.....	Child and Adolescent Mental Health Management Information System
CBT.....	Cognitive Behavior Therapy
CMHS .....	Center for Mental Health Services
EBFT.....	Ecologically Based Family Therapy
EBP.....	Evidence-Based Practices
HIPAA.....	Health Insurance Portability and Accountability Act
ICC.....	Intra Class Correlation
IIH.....	Intensive In-Home
FGC.....	Family Guidance Center
MAR.....	Missing At Random
MLM.....	Multilevel Modeling
MVA.....	Missing Values Analysis
MTPS.....	Monthly Treatment Progress Summary
OOH.....	Out-of-Home
PMHC.....	Public Mental Health Care
SPSS.....	Statistical Package for Social Sciences
STT.....	Strength-Focused Treatment Target
TT.....	Treatment Target

## **CHAPTER 1. INTRODUCTION**

Positive psychology is concerned with optimizing human functioning and well-being and offers an affirming perspective on human psychology with significant implications for clinical practice (Seligman, Rashid, & Parks, 2006). Over the past two decades, positive psychologists have urged colleagues to focus on competence enhancement and growth promotion instead of pathology and problem-oriented outcomes (Hendriks, Schotanus-Dijkstra, Hassankhan, de Jong, & Bohlmeijer, 2019). While focusing on positive aspects of mental health is not a new theme (with constructional approaches to clinical practice originally proposed by Goldiamond in 1974) the broader field of positive psychology has more recently devoted increased attention to promoting competence and enhancing wellness (Cowen & Kilmer, 2002). Contemporary models share underlying principles espousing the importance of focusing on positive factors, such as increasing activity and socialization, engaging in meaningful work, forming closer relationships, and prioritizing happiness (Burton & King, 2004; Duckworth, Steen, & Seligman, 2005; Hendriks et al., 2019). These research shifts are in line with broader policy shifts regarding mental health, evidenced by the World Health Organization (WHO)'s definition of mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community” (WHO, 2014, para. 1).

These burgeoning positive psychology models suggest that the previous deficit models (i.e., pathology and problem-oriented) are incomplete and the use of positive psychology strategies, if incorporated into interventions, could improve outcomes (Cowen & Kilmer, 2002; Duckworth, Steen, & Seligman, 2005; Goldiamond, 1974). For example, Keyes (2007) proposed the complete state model (CSM) in which well-being characteristics and mental illness

symptoms were conceptualized as two dimensions of one model. Research on the CSM suggests that individuals classified as “flourishing” (i.e., low levels of mental illness symptoms and high levels of well-being) had better physical, psychological, and psychosocial functioning (Keyes, 2010).

Many positive psychology strategies focus on enhancing client strengths, such as interpersonal skills, insight, sense of purpose, perspective taking, and optimism as a means to promote wellness, reduce dysfunction, and improve client outcomes (Seligman, Steen, Park, & Peterson, 2005; Hendriks et al., 2019). Research suggests targeting strengths can broaden the understanding of mental health to include both symptomology and wellness, encourage ecological approaches to working with youth clients (Saleebey, 1992; Tadeschi & Kilmer, 2005; Toback, Graham-Bermann, & Patel, 2016), increase cultural competency (Goldston, Molock, & Whitbeck, 2008), better affirm clients by priming positive expectations (Saleebey, 1992; McCammon, 2012) and enhance rapport (Cox, 2006; Tedeschi & Kilmer, 2005).

### **Strengths Defined**

Based on the literature on strengths and positive psychology, this study defined youth strengths broadly to include: characteristics, attributes, repertoires, abilities, thoughts, skills, behaviors, or resources, located at the individual, family, interpersonal, community, or environmental level, which may reinforce and/or support the development of desired behaviors, protect against the negative effects of risk, and/or promote health and well-being (Accomazzo, Shapiro, Israel, & Kim, 2017; Duckworth, Steen, & Seligman, 2005; Ghielen, van Woerkom, & Meyers, 2018).

## **Strengths and Public Policy**

In the United States, youth mental health policy-makers have made efforts to increase focus on strengths in addition to problem areas, in part as a reaction to an overemphasis on pathology and related deficit-based views of deviant behavior (Center for Mental Health Services [CMHS], 2007). Government workgroups (CMHS, 2007), researchers (Pires, 2002; Sabalauskas, Ortolani, & McCall, 2014), program directors (Halfon, 2003), and health policy-makers (Stroul & Friedman, 1986) have argued for public mental health reform that is individualized and focused on building youth, family, and community strengths.

While these clarion calls regarding the importance of strengths in public mental health abound, there are few explanations of why building on strengths is important, and how utilizing a strengths-focused approach will impact youth outcomes in these public mental health care (PMHC) settings (i.e., routine community mental health services often referred to in randomized controlled trials as ‘treatment as usual’ or ‘routine care’). In fact, Saleebey (1992, p. 3) critiqued “nods to building on strengths” as “lip service” and argued for greater operationalization and implementation of strengths-focused approaches. These calls for better definitions have led to an increase in research on strengths in public mental health services over the past two decades.

## **Interventions**

The current intervention literature suggests building on strengths may be an efficacious way of promoting wellness and reducing dysfunction (Cowen & Kilmer, 2002; Proyer, Gander, Wellenzohn, & Ruch, 2015; Quinlan, Swain, & Vella-Brodrick, 2012; Tedeschi & Kilmer, 2005). Recent meta-analytic reviews suggest small to medium effect sizes for positive psychology interventions in various populations. In a 2014 review, Donaldson, Dollwet, and Rao identified 1,336 peer-reviewed journal articles on positive psychology, including more than

750 empirical works. Of these, 161 studies were intervention-based, and included empirical tests of mindfulness, coaching, gratitude, and character strengths (Donaldson, Dollwet, & Rao, 2014). Findings from this meta-analysis indicated that these interventions were associated with decreases in negative affect, stress, and symptoms of depression and anxiety, and were associated with increases in subjective well-being, self-compassion, life satisfaction, empathy, forgiveness, and happiness (Donaldson, Dollwet, & Rao, 2014). Of the 161 empirical studies reviewed, none were conducted with clinical samples.

Another meta-analysis of 51 studies specifically focused on positive psychology interventions concluded that these interventions on average increased well-being ( $d = 0.61$ ) and reduced depressive symptoms ( $d = 0.65$ ; Sin & Lyubomirsky, 2009). Of these studies, only five were conducted with children and adolescents, and from those, only two measured and analyzed clinical symptomatology (i.e., depressive symptoms). However, even in these two studies, the samples were community-based and did not meet clinical diagnostic criteria. Another meta-analysis with narrower inclusion criteria (39 randomized control trials published between 2009 and 2012 in adult populations) showed similar results: Positive psychology interventions were effective in increasing subjective well-being ( $d = 0.34$ ) and psychological well-being ( $d = 0.20$ ) and in reducing depressive symptoms ( $d = 0.23$ ; Bolier, Haverman, Westerhof, Riper, Smit, & Bohlmeijer, 2013). Of the seven studies on clinical populations, none were conducted with children (Bolier et al., 2013).

Staudt, Howard, and Drake's (2001) review of nine studies of strength-based case management for severely mentally ill adult clients suggests clients who received strength-based services showed greater improvement compared to comparison and control groups. However, the authors note that the studies reviewed did not rigorously control for possible confounding

variables and that there was insufficient evidence to affirm a strengths-based approach was indeed effective. Moreover, none of the studies were conducted with youth.

One recent study suggests that the number of strengths focused on in treatment predicts outcomes (Cheavens, Strunk, Lazarus, & Goldstein, 2012). In this study, adult participants with major depressive disorder were randomized to 16 weeks of cognitive-behavioral treatment in which strategies used were selected based on either the capitalization approach (treatment matched to relative strengths) or the compensation approach (treatment matched to relative deficits; Cheavens, Strunk, Lazarus, & Goldstein, 2012). These researchers found that targeting relative strengths resulted in a faster rate of symptom change compared to a compensation approach ( $d = 0.69, p = .03$ ). These results suggest that selecting treatment strategies that capitalize on strengths might result in faster progress than selecting treatment strategies to ameliorate problems alone.

The empirical literature suggests some promising results from the focus of strengths in interventions; however, it also reveals that strengths have been understudied and underutilized in practice settings with children and adolescents when compared to problem-focused treatment (Accomazzo, Shapiro, Israel, & Kim, 2017; Ghielen, van Woerkom, & Meyers, 2018). Based on their review of strength-based interventions, Staut, Howard, and Drake (2001) concluded that a strengths approach is a valued stance, but it has not been adequately operationalized or measured to affirm it as an efficacious or effective practice. Though over the past two decades the research on strengths has gained momentum, the empirical literature suggests the need for more practice-based research with children and adolescents on outcomes associated with strength-based treatments (Ghielen, van Woerkom, & Meyers, 2018; Quinlan, Swain, & Vella-Brodrick, 2012).

## **Strengths in a Public Mental Health Care Setting**

There have been very few studies on strength-focused youth treatment in Public Mental Health Care (PMHC) settings. One such study by Radigan and Wang (2013) points to the assessment of strengths at the beginning of treatment being associated with significant improvements on youth behavior and discharge. However, the authors acknowledged it is unclear how strengths assessed at the beginning of services were incorporated into treatment (Radigan & Wang, 2013). Another study suggests little is known about the utilization of strength-focused treatments in PMHC (Bertram, Suter, Bruns, & O'Rourke, 2011).

PMHC is a fruitful setting in which to increase the quality and effectiveness of treatment services and to investigate potentially promising treatment approaches (Garland, Bickman, & Chorpita, 2010). There is a need to expand the scope of research on PMHC service delivery in order to identify additional factors that are important determinants of client treatment response (Garland, Bickman, & Chorpita, 2010). PMHC therapy includes a wide variety of targets, including those that seem strength-focused (Love, Mueller, Tolman, & Powell, 2014). By their nature, PMHC studies include clinical samples thereby overcoming one of the problems with the strength-focused intervention literature to date.

In order to better understand how mental health care settings can adopt strength-focused treatments for youth clinical populations, researchers must first investigate how PMHC therapists are targeting these factors. A focus on youth strengths in PMHC requires reliable and valid measurement tools that measure strengths in addition to client problems. Outcome measures in PMHC are often not those used in randomized controlled trials (RCTs) given time constraints and other barriers. PMHC research (where the participants are not under the observation of researchers as in efficacy or even effectiveness studies) must utilize measures that are

organically part of PMHC (e.g., routine progress monitoring, discharge status, need or use of later services).

## **Study Context**

Within the Hawai‘i system of care, mental health services are provided to youth and families through the Department of Education’s school-based programs and an additional array of services contracted by the Department of Health’s Child and Adolescent Mental Health Division (CAMHD, 2012). After meeting eligibility for CAMHD services, youth and their families are assigned a care coordinator, who assists in the management, planning, and coordination of treatment (e.g., CAMHD, 2012). Therapeutic services are contracted through various youth mental health provider agencies and include multiple levels of care, which range in intensity from least restrictive (i.e., intensive in-home) to most restrictive (i.e., a locked sexual offender program or residential hospital). Additional levels of care include community-based foster homes, group homes, residential treatment facilities, and emergency services, among others. The sample of youth examined in this study was limited to youth receiving their first three-month or longer episode of intensive in-home (IIH) treatment, the least restrictive level of care provided by CAMHD. IIH was chosen to maximize generalizability to other PMHC settings for the following reasons: (a) youth receiving CAMHD services most often receive IIH (Hill, Burgess, Hee, Jackson, & Nakamura, 2014); (b) IIH does not restrict clients on the basis of their diagnoses or a specific set of psychological issues; (c) IIH does not prescribe treatment practices or targets of therapy, unlike some other levels of care that are structured around common treatment goals and therapist practices; and (d) IIH is the level of care most similar to outpatient therapy, the most studied treatment in the clinical psychology literature.



One measure utilized to track treatment focus in CAMHD is the Monthly Treatment and Progress Summary (MTPS; CAMHD 2008), which was developed as part of a statewide initiative to track and improve services in children's mental health systems (Chorpita & Donkervoet, 2005). The instrument was designed to assess what practitioners were treating (treatment targets; e.g., self-esteem, shyness), where they were doing it (service format and setting), what techniques or strategies they were using (referred to as practice elements or PEs; e.g., activity scheduling, time out), and whether youth were getting better (clinical progress ratings, discharge status; CAMHD, 2008). On the MTPS, therapeutic objectives are conceptualized as "treatment targets" that encompass symptoms (e.g., depressed mood), non-disordered behaviors (e.g., low self-esteem) or nonspecific factors (e.g., treatment engagement) as areas of clinical focus (Daleiden, Lee, & Tolman, 2004). Importantly, there are numerous targets that appear to align with a strength-focused approach (e.g. positive peer involvement). Indeed, a good number of apparently positive targets are quite commonly included in treatment episodes (Love, Mueller, Tollman, & Powell, 2014).

Aggregated together, treatment targets might be conceptualized as behaviors that are targeted for change in treatment and serve as a proxy for individual strengths or needs. In fact, the MTPS user manual defines these treatment targets as the "strengths and needs being addressed as part of the mental health services for that youth" (p. 2; CAMHD, 2008), providing an appropriate starting point for measuring the use of strengths in CAMHD, a PMHC system. However, the manual does not clearly demarcate which targets are needs or strengths. As such, the first step of this study was to operationalize strength-focused treatment targets using a coding system.

## **The Present Study**

In a preliminary study in which treatment targets were coded as “positive” or “problem” oriented, positive treatment targets were endorsed at a slightly higher frequency when compared to problem treatment targets and showed slight but not significantly higher improvement rates (Turner, Wilkie, Matro, & Mueller, 2017; see also Love, Mueller, Tollman, & Powell, 2014). The current study builds upon these findings to determine if a greater incorporation of strength-focused targets is associated with a higher probability of a successful treatment discharge, while also controlling for variance not accounted for in the original study (e.g., youth characteristics, length of treatment). Furthermore, the current study advances this preliminary study by utilizing a more systematic coding procedure to operationalize targets as strength-focused.

For the present study, the degree to which treatment is focused on such strengths was determined by the extent to which strengths were endorsed as a target of therapy by clinicians. A strength-focused treatment target is defined as a treatment target in which the aim is to promote and/or enhance positive individual, family, and environmental factors (e.g., characteristics, attributes, repertoires, abilities, thoughts, skills, behaviors, or resources) in order to foster well-being and to reduce dysfunction. Treatment targets that focus on improving a negative characteristic, though such a focus might eventually lead to the promotion or enhancement of positive factors, was not considered a “strength-focused” treatment target. For example, in this study if a youth was being treated for disruptive behavior, a clinician could target “Aggression” or “Anger” and these would not be considered a strength-focused treatment targets. Whereas, if the clinician endorsed the targets “Positive Peer Interaction” or “Self-Management/Self-Control” these would be considered strength-focused treatment targets. This example demonstrates the

possibility of addressing the same clinical features by focusing on teaching and supporting positive repertoires (i.e., strengths) or by focusing on problem areas.

### **Study Aims**

The current study aimed to reliably identify strength-focused treatment targets (STTs) from a larger list of targets and to describe how frequently such targets are focused on by PMHC therapists at the intensive in-home (IIH) level of care in the CAMHD system. A multilevel model was then used to examine the association between the endorsement of STTs and the probability of successful discharge. This study hypothesized that a greater proportion of STTs endorsed would be associated with a higher likelihood of a successful treatment discharge.

## CHAPTER 2. METHOD

### Data Source

A limited data set was electronically extracted from the Child and Adolescent Mental Health Management Information System (CAMHMIS) at the state of Hawai'i's Child and Adolescent Mental Health Division (CAMHD). Clinical documentation of all registered clients within the CAMHD system is recorded and stored in accordance with performance standards (CAMHD, 2012). Archival data for all youth between the ages of 3 and 19 who procured services from CAMHD from July 1, 2006 to June 30, 2017 were examined.

### Participants

**Youth participants.** Table 1 provides demographic information for youth included in this study for the total sample. Participants ( $n = 1,841$ ) consisted of all youth who (a) received an initial episode of care at the IIH level between July 1, 2006 and June 30, 2017, (b) had at least three MTPSs during the treatment episode, (c) were between the ages of 3 and 19 at treatment episode start, and (d) had a completed discharge summary at the end of the episode. Only participants with a discharge that could be categorized as “successful” or “unsuccessful” were included in the analyses. Figure 1 provides more detailed information about sample criteria at various decision points.

**Clinician participants.** Therapist information is provided in Table 2. There were 353 primary MTPS reporters who provided clinical data on youth in the sample, with an approximate average of 5 clients per reporter. In the event that multiple therapists provide services for a client within the month reflected by the MTPS, the therapist that is most familiar with the youth, family, and services provided during that month is responsible for completing the MTPS, after consulting with the other therapists (CAMHD, 2012). Each youth client had between one and

three MTPS reporters, and the primary reporter role was attributed to the clinician who submitted the greatest number of MTPSs for the client during their first episode of IHH care. If two MTPS reporters submitted an equivalent number of MTPSs for the same client, the primary reporting role was assigned to the clinician who submitted the first MTPS for the client during the study period. This decision was made because previous research suggests that youth typically see more rapid improvement earlier in treatment (Orimoto, Jackson, Keir, Ku, & Mueller, 2012), suggesting potential greater importance of therapist-patient interactions during the early stages of treatment.

The majority of reporters, hereafter referred to as “clinicians,” “providers,” or “therapists” were mental health professionals ( $n = 328$ , 92.9%) who had all obtained at least a master’s degree. Therapist licensure and degree did not significantly vary by client gender, age, ethnicity, or diagnosis. While the CAMHD credentialing database used for the current study does not include therapist demographic information (e.g., age, ethnicity, gender), therapist characteristics in the current study are likely similar to those found in prior studies including CAMHD therapists, which have reported therapists as being approximately 75% female, ethnically diverse, and having a mean age of around 40 years old (Nakamura, High-McMillan, Okamura, & Shimabukuro, 2011; Orimoto, High-McMillan, Mueller, & Daleiden, 2012).

## **Measures**

### **Monthly Treatment and Progress Summary (MTPS; CAMHD, 2005; Appendix A).**

The MTPS is a therapist report form designed to collect ongoing information on service formats, settings, service dates, treatment targets, practice elements, client progress ratings, medications and dosage, reason for discharge, and discharge living situation. Since 2006, contracted therapists within CAMHD have been required to complete MTPS forms each month for all youth

in order to receive reimbursement for their services (Nakamura, Daleiden, & Mueller, 2007). CAMHD has also provided statewide trainings on using the MTPS and has created the Instructions and Codebook for Therapist Monthly Summaries, which is available to therapists online (see Appendix B; CAMHD, 2012).

A qualified supervisor verifies the accuracy of the information, signs and dates the MTPS, and sends the form to the Care Coordinator by the fifth day of each month. All statewide MTPS data are entered into the CAMHMIS through standardized procedures at the various Family Guidance Centers. The CAMHMIS is a data management system that is compliant with the standards set by the Health Insurance Portability and Accountability Act (HIPAA).

***Treatment targets.*** On the MTPS, treatment targets encompass the diversity of clinical areas of focus addressed by CAMHD therapists and become a useful descriptive tool. On the MTPS, therapists are instructed to identify up to ten treatment targets addressed during the month, in any order, from a list of 53 predefined responses and two write-in fields. These treatment targets reflect not only collaborative therapist and family decisions about what to prioritize in treatment, but also anticipated barriers to treatment engagement, available system or agency resources, and therapist areas of clinical expertise (Daleiden, Lee, & Tolman, 2004). Therapist endorsement of a treatment target is measured monthly and does not account for the amount of time spent on a particular treatment target; therefore, endorsement of a target was considered relative to all the targets endorsed on each MTPS.

***Discharge information.*** During the month a client is discharged, therapists report the reason(s) for discharge from six predefined choices (i.e., success/goals met, insufficient progress, refuse/withdraw, family relocation, runaway/elopement, and eligibility change) and one write-in choice. Discharge reason should be completed for the last MTPS associated with a youth's

treatment episode. Previous analyses have demonstrated convergent validity of therapist selection of the discharge reason “success/goals met” with youth demonstrating clinical and reliable change (i.e., a decrease in 30 or more points on the Child and Adolescent Functional Assessment Scale [CAFAS], and a CAFAS of 70 or less at discharge; Jackson, Hill, Sender, & Mueller, 2017).

**Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1994; Appendix D).** The CAFAS is a 200-item therapist-report measure that assesses youth functional impairment. Based on clinical interviews, case managers in CAMHD assign a behavioral descriptor by level of impairment across eight domains of functioning: School Role Performance, Home Role Performance, Community Role Performance, Behavior Toward Others, Mood/Emotions, Mood/Self-Harmful Behavior, Substance Use, and Thinking. Scores for each CAFAS subscale are calculated by scoring the highest level of impairment (i.e., severe = 30, moderate = 20, mild = 10, no/minimal = 0) endorsed within the respective domain. The total CAFAS score is obtained by summing across the eight subscales, with a score of 80 or higher as the typical qualifying score for CAMHD services (Jackson, Hill, Sender, & Mueller, 2017).

The CAFAS has demonstrated adequate internal consistency across items ( $\alpha = 0.63$  to  $0.68$ ), with high inter-rater reliability across different respondents ( $r = 0.92$  to  $0.96$ ) (Hodges, 1995; Hodges & Wong, 1996). CAFAS scores at intake have evidenced predictive relationships with service utilization, outcomes and cost (Kier, Jackson, Mueller, & Okado, 2014). Studies examining concurrent validity have found that CAFAS scores are a sensitive estimate of treatment change (Hodges & Gust, 1995; Hodges & Wong, 1996; Mueller, Tolman, Higa-McMillan, & Daleiden, 2010; Nakamura, Daleiden, & Mueller, 2007).

In this study, a client's baseline CAFAS score (i.e., the CAFAS score that is dated closest, either prior to or after, the start date of the IHH treatment episode) was examined as a covariate at the client level. The CAFAS score was considered as a baseline score if it was provided within one year prior to the start of the treatment episode or within 90 days after the start of treatment. Using these criteria, 300 CAFAS scores (16.30%) were determined to be invalid (i.e., more than 90 days after or more than 365 days before the start of the treatment episode), 83 CAFAS scores (4.5%) were completely missing, and 1,458 CAFAS scores (79.19%) were valid. Mean CAFAS administration in the sample occurred 32.65 days ( $SD = 71.03$ ) before the start of treatment.

In this study, CAFAS scores were categorized using the interpretation suggested by Hodges (2005) and the structure of the CAMHD system of care. Guidelines for interpreting the total score suggest the use of the following five categories: 0-10 = "None to minimal impairment"; 20-40 = "Likely can be treated on an outpatient basis"; 50-90 = "May need additional services beyond outpatient care"; 100-130 = "Likely needs care which is more intensive than outpatient and/or which includes multiple sources of supportive care"; and 140+ = "Likely needs intensive treatment, the form of which would be shaped by the presence of risk factors and the resources available within the family and the community" (Hodges, 2005). There were only four individuals with a CAFAS score below 20 in the sample, therefore this group was combined with the 20-40 group. The final four levels of CAFAS impairment categories used in this study are as follows: Level 1 (minimal impairment/outpatient, scores 0-40,  $n = 103$ ), Level 2 (fitting for intensive in-home treatment, scores 50-90,  $n = 975$ ), Level 3 (multiple sources of supportive care, scores 100-130,  $n = 608$ ), and Level 4 (inpatient treatment, scores 140+,  $n = 155$ ).



## **Procedures**

**Data source.** Staff from the Research Evaluation and Training Program (RET) electronically extracted a limited dataset with client clinical and demographic data from CAMHMIS for the service period in question. CAMHMIS maintains records on all CAMHD clients, consistent with CAMHD's data storage procedures (CAMHD, 2012). Therapist data were electronically extracted from the credentialing database from the Credentialing Office of CAMHD.

**Human subjects considerations.** Upon entry into CAMHD, the legal guardian of the youth receives a complete description of CAMHD's privacy policies and signs a Notice of Privacy Practices consent form, which includes consent for the use of data for research purposes. This consent form adheres to the HIPAA standards. This study was submitted to the University of Hawai'i at Mānoa Office of Research Compliance Human Studies Program Institutional Review Board and received exempt approval (protocol # 2018-00315) due to (a) the nature of this study being archival, (b) the fact that legal guardians of youth under study are required to sign the Notice of Privacy Practices to receive services, and (c) the data-limited nature of the data (i.e., no directly identifiable client information).

**Mapping treatment targets onto strength criteria.** A detailed codebook was developed to allow independent coders to reliably code targets as strengths (see Appendix C for the codebook). Then, two clinical psychology graduate student raters were trained on this codebook and independently coded MTPS treatment targets to the categories "strength-focused" treatment target or "other" based on definitions provided. Treatment target titles and descriptions from the MTPS training materials (CAMHD, 2012; see Appendix B) were provided for the purpose of coding. In order to prevent data for the same target from being used in more

than one comparison group during subsequent analyses, coders were instructed to assign all targets to the single category (i.e., “strength-focused” or “other”). Disagreements were resolved by the primary investigator.

### **Data Analytic Strategy**

**The main predictor variable.** The main predictor variable was the proportion of strength treatment targets out of the total number of treatment targets endorsed over the course of a treatment episode. Treatment targets endorsed more than once in an episode were counted each time they were endorsed in order to better capture dosage. The strength proportion score was represented by the following equation.

$$\frac{\Sigma \text{ Strength Treatment Targets endorsed across the episode}}{\Sigma \text{ Total Treatment Targets endorsed across the episode}}$$

**The criterion variable.** A dichotomous outcome variable was derived by coding the end of treatment MTPS discharge summary as “successful” or “unsuccessful.” Consistent with a previous study, discharge reason was represented by a dichotomous variable that is coded 1 for “successful” (i.e., success/goals met) and 0 for “unsuccessful” (i.e., runaway/elopement, refuse/withdrew, and insufficient progress; Jackson, Hill, Sender, & Mueller, 2017). Other reasons for discharge (i.e., eligibility change, family relocation, and other) were not included in the analysis due to not being clearly indicative of “successful” or “unsuccessful” discharge status.

**Data preparation.** First, minimum and maximum values (i.e., response ranges) for each item, subscale, and total of all measures were calculated to identify potential data entry errors. MTPSs were inspected to ensure that each episode included had at least one treatment target and a completed discharge summary. Next, the means, standard deviations, skewness, and kurtosis of relevant variables were examined. Assumptions for conducting multilevel modeling (MLM)

analyses were tested and found to be appropriate (e.g., sufficient variance in the criterion variable, normal distribution of residuals for the criterion variable, and non-multicollinear predictors; Quene & van den Bergh, 2004; Raudenbush & Bryk, 2002).

**Missing data.** The method of analysis used in this study was Multilevel Modeling (MLM). MLM allows for participants within a study to have incomplete or unequal amounts of data for each participant (Quene & van den Bergh, 2004; Raudenbush & Bryk, 2002). However, MLM assumes that data missing in the sample are missing at random (MAR; Quene & van den Bergh, 2004; Raudenbush & Bryk, 2002). Additionally, previous studies utilizing CAMHD data have indicated some missing data despite the mandatory nature of MTPS completion (i.e., CAFAS scores; Milette-Winfrey & Mueller, 2017). Therefore, a Missing Values Analysis (MVA) was run in the Statistical Package for Social Sciences (SPSS) version 25 and it was determined that data in the sample were Missing at Random (MAR; Little & Rubin, 1987). Specifically, CAFAS data were missing for 383 youth ( $383/1,841 = 20.80\%$ ). To address this missing data so that participants would not be excluded if they did not have a CAFAS score, multiple imputation was used to calculate these values using relevant variables that occurred on the same level (i.e., level-one; participant variables) of the analysis as the CAFAS total scores. Multiple imputation with five iterations was completed in SPSS to generate five simulated datasets in which the 383 CAFAS scores were estimated and imputed. Single-level analyses of these five simulated datasets were then compared to determine whether any coefficients, F values, or *p* values changed significantly across the original and five iterative datasets. None of these values changed substantially to suggest they might affect main analyses. Therefore, the analyses reported below include the imputed CAFAS scores (i.e., an average of the five iterations).

**Logistic multilevel modeling (MLM) analyses.** A logistic MLM was utilized to determine whether the proportion of strength treatment targets (STTs) significantly predicted discharge status after controlling for other significant predictors. Analyses followed guidelines discussed by Heck, Thomas, and Tobata (2013), which noted steps needed to conduct a MLM analysis of categorical outcomes. MLM is an appropriate method for analyzing nested data structures (e.g., clients nested within clinicians). When clients are assigned to the same clinician, their experiences are likely to be dependent on clinician characteristics, violating the assumption of independent observations in traditional regression analysis (Heck, Thomas, & Tobata, 2013). Other analytic approaches that do not account for nested data can produce misestimated standard errors, incorrect statistical inferences, and biased coefficients (Singer & Willett, 2003). Therefore, the MLM developed in this study statistically controlled for clients nested within clinicians.

Two levels were examined, with a given youth's first IHH episode variables (i.e., proportion of strengths targeted during the selected episode, child clinical and demographic characteristics, impairment as measured by CAFAS closest to start of treatment, number of MTPSSs) conceived as level-one predictors, and clinician variables (e.g., credentials) conceived as level-two predictors. Beta weights, standard errors, effect sizes, and *p* values were examined to determine whether these variables accounted for a significant proportion of the variance explained within the model. Age was centered on the grand mean, and the strengths proportion score was standardized to maximize the interpretation of the data and the impact these variables had on the end of treatment discharge status (Heck, Thomas, & Tobata, 2013).

In multilevel models with categorical outcomes, estimates are nonlinear and use Taylor series expansion, a quasiliikelihood approach (Heck, Thomas, & Tobata, 2013). In IBM SPSS

version 25 the estimation model is referred to as active set model (ASM) with Newton-Raphson estimation (Heck, Thomas, & Tobata, 2013). To build the full MLM, an unconditional model (also called null model) containing no predictor variables was used to determine MLM appropriateness. The unconditional model intercept parameter is the following for individual  $i$  nested within clinician  $j$ :  $\eta_{ij} = \gamma_{00} + u_{0j}$ . The interclass correlation (ICC) was used to estimate if a significant proportion of variance in successful discharge lies at the clinician level:  $\rho = \sigma^2_{Between} / (\sigma^2_{Between} + 3.29\sigma^2_{Within})$  (Heck, Thomas, & Tobata, 2013). The ICC may range from 0 to 1, where an ICC of 0 indicates perfect independence of residuals indicating the observations do not depend on cluster membership. The ICC for all models was calculated. Due to the rescaling of level-one variance in logistic regression models, comparisons across successive models is not recommended (Heck, et al., 2012). The minimum significance level for all significance tests in this study was  $p < .05$ . Results at more stringent significance levels are noted.

Clinician-level variance (i.e., random effect variance) indicated whether the intercept varied between clinicians, in order to confirm the appropriateness of MLM for this dataset. A full model that included individual- and clinician-level characteristics was created. All variables were entered into the models as fixed effects. Dummy variables were created for all categorical variables. Model coefficients were calculated as odds ratios (*OR*) and their 95% confidence intervals (*CI*) were reported. In general, the *OR* represents the likelihood of successful discharge when controlling for all other variables in the model. The intercept for each model represents individual likelihood to be successfully discharged when controlling for all variables in the model. For variables entered into the model as categorical, the “0” value for each variable represents the comparator group.

Below is the equation that represents the multilevel model for the current study, where  $\eta_{ij}$  is the predicted log odds and  $\beta_{0j}$  is the intercept for the  $j$ th group. This model uses the logit link function, which is the natural logarithm of the odds that  $Y = 1$  (successful discharge, as denoted by  $\pi_{ij}$ ) versus  $Y = 0$  (unsuccessful discharge, as denoted by  $1 - \pi_{ij}$ ) (Heck, Thomas, & Tobata, 2013). For each individual  $i$  in clinician  $j$ , the effect of client predictors ( $X_{(1-q)ij}$ ) and clinician predictors ( $W_{(1-sq)j}$ ) on treatment discharge can be expressed as:

$$\eta_{ij} = \log \left[ \frac{\pi_{ij}}{1 - \pi_{ij}} \right] = \beta_{0j} + \beta_{1j}X_{1ij} + \beta_{2j}X_{2ij} + \dots + \beta_{qj}X_{qij}$$

$$\beta_{qj} = \gamma_{q0} + \gamma_{q1}W_{1j} + \gamma_{q2}W_{2j} + \dots + \gamma_{qp}W_{sqj} + u_{qj}$$

## CHAPTER 3. RESULTS

### Descriptive Analyses

**Coding for strength targets.** In order to evaluate if treatment targets were reliably coded, inter-rater coder agreement was calculated using Cohen's kappa coefficient (Cohen, 1960). Inter-rater agreement was  $k = .88$ , indicating "almost perfect" agreement (Cohen, 1960). Of the 53 targets reviewed, 20 were reliably coded (i.e., both coders agreed) as "strength-focused" and 30 were reliably coded as "other." Three treatment targets were indicated to be "strength-focused" by only one of the coders. These three targets (Housing/Living Situation, Pregnancy Education/Adjustment, and Speech Language Problems) were subsequently not retained as "strength-focused" and were coded as "other" due to coder disagreement and a subsequent tie-breaker by the primary investigator. The final groupings included 20 strength-focused treatment targets and 33 other treatment targets (see Table 3). Positive Peer Interaction was the most commonly endorsed of the strength-focused TTs ( $n = 10,434$ ), followed by Activity Involvement ( $n = 6,576$ ), Social Skills ( $n = 3,457$ ), Positive Thinking or Attitude ( $n = 3,012$ ), Treatment Engagement ( $n = 2,798$ ), Academic Achievement ( $n = 2,786$ ), and Contentment, Enjoyment, or Happiness ( $n = 2,289$ ). Figure 2 shows the frequency of endorsement of each treatment target.

### Bivariate Analyses

Exploratory analyses were conducted to examine the relationships between all variables. Chi-square tests were used to explore expected and observed frequencies of each categorical variable with the outcome variable (discharge status; see Table 4). T-tests were used to discern significant differences between successful and unsuccessful discharged youth as a function of several key variables (see Table 5). Relationships between the predictor variable (strengths

proportions score) and covariates were tested using Pearson's correlation and point-biserial correlation in order to test for collinearity (i.e., correlation coefficient  $> .70$  was considered collinear; Cohen, 1988).

When looked at in a bivariate fashion, the association between the predictor variable and the criterion variable was small but significant. As predicted, a higher proportion of strengths targeted in treatment was positively correlated with successful discharge ( $r_{pb} = .04$ ,  $p < .05$ , one-tailed test). Higher proportion of strengths was also associated with older client age ( $r = .23$ ,  $p < .01$ ) and female gender ( $r_{pb} = .09$ ,  $p < .01$ ; see Table 6).

Results from chi-square tests indicated that successfully discharged youth were more likely to be female ( $\chi^2(1, n = 668) = 5.55$ ,  $p = .02$ ), white ( $\chi^2(1, n = 188) = 4.57$ ,  $p = .03$ ), and have a primary diagnosis of attention deficit/hyperactivity disorder ( $\chi^2(1, n = 349) = 6.64$ ,  $p = .01$ ) or schizophrenia/other psychotic disorder ( $\chi^2(1, n = 26) = 3.79$ ,  $p = .05$ ). Unsuccessfully discharged youth were more likely to be Native Hawaiian or Pacific Islander ( $\chi^2(1, n = 163) = 8.49$ ,  $p = .004$ ), and have a primary diagnosis of disruptive, impulse control, and conduct disorder ( $\chi^2(1, n = 504) = 13.38$ ,  $p < 0.001$ ; see Table 4).

Results from independent sample t-tests suggested significant differences between youth with successful discharge and unsuccessful discharge on several continuous demographic variables (see Table 5). Convergent with the point biserial association reported above, the average standardized strengths proportion score was significantly higher when discharge was successful ( $M = .02$ ,  $SD = .99$ ) than when unsuccessful ( $M = -.07$ ,  $SD = 1.03$ ;  $t(1,841) = -1.77$ ,  $p < .05$ ; one-tailed). The average number of MTPSs was significantly less when discharge was successful ( $M = 10.62$ ,  $SD = 7.81$ ) than when unsuccessful ( $M = 8.57$ ,  $SD = 7.06$ ;  $t(1,841) = -4.91$ ,  $p < .01$ ). The average age was significantly younger when discharge was successful ( $M =$



12.04,  $SD = 3.99$ ) compared to unsuccessful ( $M = 13.23$ ,  $SD = 3.51$ ;  $t(1,841) = 5.62$ ,  $p < .01$ ).

### **Multilevel Model**

Convergent with the high percent of successful discharge in this sample (i.e., 76% of youth were successfully discharged), the intercept odds for the unconditional MLM were also high at 3.01 ( $CI\ 2.75$ - $3.64$ ,  $p < .001$ ). An ICC of .096 suggests that 9.6% ( $CI\ .06$ -. $16$ ,  $p < .001$ ) of the total variability in successful discharge was accounted for by level 2 clinician differences. Since the standard deviation of the intercept (or random effect intercept) between clinicians was statistically significant, it can be assumed that the intercept varied significantly between clinicians, and provides justification for the use of MLM for this data set. The results of the logistic MLM are presented in Tables 8 and 9.

In the full MLM the standardized strengths proportion score was entered into the model as the main predictor with significant youth and clinician characteristics as covariates. When holding other variables constant, a statistically significant, positive relationship was found between the strength proportion score and the odds of successful discharge,  $OR = 1.21$ ,  $CI\ 1.07$ - $1.37$ ,  $p = .003$ . Said another way, as the percentage of strengths targeted increased from 46% (grand mean) to 64% of total targets endorsed (one standard deviation above the mean), the odds of successful discharge increased by 21%. This finding persisted despite other significant predictors of successful discharge.

The results indicate youth with CAFAS greater than 140 ( $OR = .35$ ,  $CI\ .19$ -. $65$ ;  $p = .001$ ), and for CAFAS 100-130 ( $OR = .54$ ,  $CI\ .31$ -. $95$ ;  $p = .03$ ), were less likely to be successfully discharged when compared to youth with a CAFAS score below 40. Youth with a CAFAS score in the 50-90 range had similar odds of successful discharge to youth in the 0-40 range. As client

age at episode entry increased, likelihood of successful discharge decreased .94 (*CI* .90-.97;  $p < .001$ ). Neither of the clinician credentialing variables were significant predictors.

### **Additional Analyses**

**Individual TT Predictor of Discharge.** Table 10 indicates the relationship between the presence or absence of an given treatment target at any point in the episode and the rate of successful discharge. As can be seen 16 of the 53 targets were significantly associated with discharge outcome (using  $p < .05$  which brings cumulative alpha error into consideration). Six of the seven statistically significant strength focused treatment targets were in the predicted direction, with only “treatment engagement” predicting lower rates of success than average. Five of the ten other (non-strengths) significant treatment targets were positively associated with successful discharge and five were in the opposite direction. Ignoring statistical significance, 18 of the 20 strength-based targets (90%) show a positive relationship with successful discharge (associated with success rates higher than the 76.2 base rate). Twenty-one of the 33 non-strength targets (63%) were associated with higher successful discharge rates.

## **CHAPTER 4. DISCUSSION**

The primary aim of this study was to determine whether and to what extent targeting strengths in youth intensive in-home therapy was associated with successful treatment discharge. This study utilized a coding system to identify strength-focused treatment targets as a construct for this study. The high inter-rater agreement in the coding suggests that strengths can be reliably identified in public mental health care systems, and therefore analyzed. Findings from both the bivariate and the MLM analyses support the hypothesis that a higher proportion of strength treatment targets in an episode of care predicts a greater likelihood of successful discharge. Additional significant predictors of successful discharge included younger client age, more MTPSs (i.e., a proxy for treatment length), and lower functional impairment (CAFAS) at treatment start. While therapist differences accounted for some variance in outcomes, neither of the two available credentialing variables were significantly related to outcomes.

Findings align with previous research that suggests a focus on strengths in psychological interventions could improve outcomes (Cowen & Kilmer, 2002; Duckworth, Steen, & Seligman, 2005; Goldiamond, 1974). Much of the prior research on strengths has focused on adult and non-clinical populations. Although a fairly small correlational effect, the fact that the proportion of strength-focused treatment targets was associated with higher success rates extends the current literature to include highly impaired youth in public mental health care. When examined in a bivariate fashion six of the strength TTs (i.e., Adjustment to Change; Assertiveness; Peer Involvement; Contentment, Enjoyment, or Happiness; Social Skills; and Positive Peer Interaction) were significantly related to higher successful treatment rates and these targets closely aligned with treatment components identified in the positive psychology literature (i.e., increasing activity and socialization, increasing ability to cope, engaging in meaningful work,

forming closer relationships, and prioritizing happiness; Burton & King, 2004; Duckworth, Steen, & Seligman, 2005; Hendriks et al., 2019).

The present findings might indicate that targeting strengths in treatment increases positive repertoires that mitigate the impact of psychopathology. For example, if a clinician is treating a youth with symptoms of disruptive behavior and they were to choose between the strength-focused treatment target “Social Skills” or the not strength-focused treatment target, “Willful Misconduct/Delinquency” (see Appendix B for definitions), it might be that in the strength-focused condition, the youth is learning new positive behaviors compared to the other condition in which the focus is on deficits in behavior and thinking. Indeed, in this study the endorsement of Social Skills was significantly related to successful discharge (81.6% success), whereas Willful Misconduct/Delinquency was significantly related to unsuccessful discharge (62.8% success).

Other unmeasured factors might explain these findings, such as the role of strengths in priming positive expectations of treatment and increasing therapeutic alliance. As previous research has speculated, it is possible the use of strengths in treatment primes individuals for positive expectations of treatment and thereby increases individual self-efficacy. Therefore, it is possible in this sample that youth with a greater proportion of strengths targeted had a higher likelihood of successful discharge due to increased belief that treatment was beneficial and that they would succeed in treatment. Relatedly, it is possible that a focus on strengths improves rapport and thereby increases treatment engagement leading to greater gains in therapy. Indeed findings suggest that youth who engage in treatment for longer (i.e., youth with more MTPSs) were more likely to be successfully discharged.

Perhaps clinicians who use a strength-focused orientation are more effective at reducing symptoms and improving treatment outcomes. In this study, 9.6% of the variance was found at the clinician level. However, the clinician variables included in this study (i.e., credentialing data) were not significant predictors. It is possible that other clinician-level variables not included in the study (e.g., therapist race, therapist gender, theoretical orientation, experience, training in the use of strengths) can account for the relationship between the use of strengths and successful discharge. Due to the limited nature of the data, it is not possible to determine if other clinician characteristics impacted discharge status.

In interpreting the results, other significant predictors of discharge deserve consideration. Higher CAFAS total score was a small but significant predictor of unsuccessful discharge and replicates prior findings (Jackson, Hill, Sender, & Mueller, 2017). It is noteworthy that higher CAFAS scores were also associated with lower endorsement of strengths. As a measure of impairment across multiple domains, youth with a higher CAFAS total score might also have presented with more needs in treatment, resulting in less focus specifically targeted towards strengths. However, the proportion of strengths targeted was still associated with a higher likelihood of successful discharge, even when controlling for client impairment in the full model. This suggests that though functional impairment as measured by CAFAS is associated with fewer strengths targeted in an episode, when a therapist does endorse more strengths these youth have a higher likelihood of successful treatment discharge.

The finding that younger age was associated with higher likelihood of successful discharge can be interpreted in a few ways. In this study, younger clients were more likely to have longer treatment episodes, therefore the relationship between lower age and discharge might be similarly related to treatment length. Another possibility might be younger clients are

less impaired and thus therapists focus on more strengths due to less on-going problem areas. Pearson correlation analyses suggested that the CAFAS total score shows a strong positive correlation with age, supporting the possibility that younger clients in the sample demonstrated less functional impairment.

These results provide some important information about how strengths are utilized in public mental health care settings and how their use is related to treatment outcomes. With regard to clinical implications, findings from this study suggest that perhaps therapists should target client strengths in children's mental health treatment at a higher proportion or dosage when compared to targeting other areas such as client deficits, needs, or problem areas. There is a broad need for systematic research on public mental health care settings, given the barriers experienced by youth accessing community health care and the lack of research on strengths in these settings. Though the age, gender, and diagnostic characteristics of the present sample are consistent with those reported in other systems of care (e.g., Garland, Bickman, & Chorpita, 2011), it is unknown how results from the present study generalize to other community-based populations. More empirical work in this area will help to bridge the gap between research and practice and improve dissemination and implementation efforts for these often underserved youth.

### **Limitations**

Findings must be interpreted within the context of study limitations, many of which are related to the reliance on the use of administrative data (data collected for non-research purposes, but which may be used for research). The data are correlational and were collected through clinician self-report. The analyses used a proportion score to capture the use of strength-focused treatment and therefore might not be an accurate account of dosage of strength focus in this

study. The dataset is missing many variables that might impact both strengths and treatment outcomes, such as interventions used and clinician training. And lastly, empirical research suggests that an increase in strengths can decrease symptoms of psychopathology, however symptom change was not measured in this study.

While therapist self-report is a cost-effective method for studying “treatment as usual,” it may be less reliable and/or valid for identifying treatment information than the labor-intensive method of observational coding (Nakamura, Daleiden, & Mueller, 2007; Borntrager, Chorpita, Orimoto, Love, & Mueller, 2013). Previous research has suggested therapist self-report and observation of therapist behavior can be inconsistent (e.g., Hurlburt, Garland, Nguyen, & Brookman-Frazee, 2010). Therefore, self-report measures are at risk of reporter bias, and as a measure of therapist activity and treatment outcomes in this study should be interpreted with caution. However, previous studies on the MTPS have indicated that treatment target endorsement follows predictable patterns with regard to diagnoses (Daleiden, Lee, & Tolman, 2004) and factor in a meaningful way (Love, Okado, Orimoto, & Mueller, 2018).

Though the MTPS is mandatory, there were 1410 discharge summaries missing from the dataset and 529 discharge summaries that were categorized as “other” (i.e., change in eligibility and family relocation). These cases were therefore not examined in this study. Additionally, of those with a discharge summary, approximately 75% were “successful.” There is a potential that available discharge summaries are biased due to clinicians being more likely to complete a discharge summary when the treatment is successful. In order to address this limitation, alternative measures of outcome could be examined (e.g., treatment target progress ratings, changes in CAFAS over time, subsequent use of services) in future studies.

A significant challenge inherent in the dataset is that therapist reports are understood on the level of month, making it commonly impossible to know what a therapist does in a given session. While the final model analysis included a measurement of treatment episode length that could account for some of the influence of treatment quantity, it did not account for the quantity of treatment within a given month (e.g., number of treatment minutes or treatment sessions).

### **Future Directions**

Findings should be interpreted with caution due to the nature of this administrative data and related limitations. The present study utilized a theoretically driven definition of strengths to create a coding system in order to identify strengths in public mental health care. The use of such a system might help further operationalize strengths, increase the replicability of this study in other systems of care, and enable the field to evolve (Quinlan, Swain, & Vella-Brodrick, 2012). A lack of standard definitions in the area of strength-based and positive psychology research makes comparisons between studies challenging. Efforts should be made to gain definitional consistency in future studies. The use of a coding system such as the one utilized in this study might be a useful tool for others when operationalizing the construct of strength-focused treatment.

Given the finding that a higher proportion of strengths targeted is significantly associated with successful discharge, future research could examine whether higher proportion of strengths is associated with reduced impairment, symptomology, or predicts recidivism to community mental health care. The contribution of unmeasured clinician variables in these analyses suggests that further attention to other clinician variables may be useful in understanding and then improving treatment for youth. Future work should make an effort to include other clinician variables (e.g., training) to address this possibility. Additionally, an examination of interventions



(or practices) used to target strengths would provide more nuanced analysis of the relationship between strengths and treatment outcome. In order to better understand the relationship between strengths and outcomes in children's public mental health treatment, future studies might consider conducting randomized control trials.

Few studies have examined the use of strengths as a treatment in clinical populations and there are no previous empirical investigations with youth. So, why are strengths so understudied in mental health? It is possible that focusing on addressing problems in mental health treatment is a flawed and incomplete framework. It is possible that this is due to an over-emphasis on pathology that assumes strengths as the mere opposite of needs or deficits. Future research could further investigate the relationship of strengths as an orthogonal component of mental health.

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## Tables

Table 1.

*Youth Demographic and Clinical Information for Total Sample (n = 1841)*

Variable	Total Sample
Sample Size <sup>a</sup>	1841 (100)
Age	12.32 (3.91)
Gender (Male) <sup>a</sup>	1173 (63.7)
Length of IIH Episode (days)	283.55 (244.38)
Number of MTPS in Episode	10.31 (7.69)
Ethnicity <sup>a</sup>	--
American Indian or Alaska Native	5 (0.2)
Asian	143 (7.8)
Black	12 (0.7)
Multiethnic	1146 (62.1)
Native Hawaiian or Other Pacific Islander	163 (8.8)
White	188 (10.2)
Unreported/ Refused to Report	184 (10.0)
CAFAS at Episode Start	89.48 (31.75)
Discharge Status <sup>a</sup>	--
Success/Goals Met	1402 (76.2)
Unsuccessful	439 (23.8%)
Diagnosis (Primary) <sup>a</sup>	--
Adjustment Disorders	176 (9.6)
Anxiety Disorders	92 (5.0)
Attention Deficit/Hyperactivity Disorder	349 (19.0)
Autism Spectrum Disorder	20 (1.1)
Bipolar and Related Disorders	58 (3.2)
Depressive Disorder	302 (16.4)
Disruptive, Impulse-Control, and Conduct Disorders	504 (27.4)
Intellectual Disabilities	3 (0.2)
Obsessive-Compulsive and Related Disorders	6 (0.3)
Posttraumatic Stress Disorder	121 (6.6)
Schizophrenia Spectrum and Other Psychotic Disorders	26 (1.4)
Substance-Related and Addictive Disorders	42 (2.3)
Other Neurodevelopmental Disorders	5 (0.3)
Other Trauma- and Stressor-Related Disorders	30 (1.6)
Other Infrequent Diagnoses	19 (1.0)
General Medical Conditions or Codes No Longer Used	47 (2.6)
Missing	41 (2.2)
Total Treatment Targets in Episode	50.53 (47.25)
Total Strength Treatment Targets in Episode	23.06 (22.81)
Strength Proportion Score	0.46 (0.18)

*Note.* <sup>a</sup>Represents frequencies and percentages. All other variables represent means and standard deviations.

Table 2.

*Therapist Information by Total Sample (n = 353)*

Variable	Total Sample
Credential <sup>a</sup>	--
Unlicensed Masters, Other	53 (15.0)
Unlicensed Masters, Certified Behavior Analyst (BCBA)	3 (0.8)
Unlicensed Masters, Mental Health Counseling (MHC)	8 (2.3)
Unlicensed Masters, Marriage Family Therapy (MFT)	69 (19.5)
Unlicensed Masters, Masters Social Work (MSW)	46 (13.0)
Unlicensed Masters, Psychology	107 (30.3)
Licensed Masters, Social Work (LSW)	22 (6.2)
Licensed Masters, Clinical Social Work (LCSW)	14 (4.0)
Licensed Masters, Marriage Family Therapy (LMFT)	9 (2.5)
Licensed Masters, Nursing (RPN)	2 (0.6)
Unlicensed Ph.D. or Psy.D.	14 (4.0)
Psychiatric Resident (MDR/Fellow)	1 (0.3)
Board Ineligible Psychiatrist (MD/DO)	2 (0.6)
APRN, Licensed – Type 1	1 (0.3)
Licensed Ph.D. or Psy.D.	2 (0.6)
CAMHD Credential Category <sup>a</sup>	--
Mental Health Professional	328 (92.9)
Qualified Mental Health Professional	25 (7.1)

*Note.* <sup>a</sup>Represents frequencies and percentages.

Table 3.

*Treatment Target Groupings as a Result of Coding*

Strength-Focused Treatment Targets	Other Treatment Targets
Activity Involvement	Aggression
Academic Achievement	Anger
Adaptive Behavior/Living Skills	Anxiety
Adjustment to Change	Attention Problems
Assertiveness	Avoidance
Community Involvement	Cognitive-Intellectual Functioning
Contentment/Enjoyment/Happiness	Depressed Mood
Empathy	Eating/Feeding Problems
Health Management	Enuresis/Encopresis
Medical Regimen Adherence	Fire Setting
Occupational Functioning/Stress	Gender Identity Problems
Peer Involvement	Grief
Personal Hygiene	Housing/Living Situation
Positive Family Functioning	Hyperactivity
Positive Peer Interaction	Learning Disorder/Underachievement
Positive Thinking/Attitude	Low Self-Esteem
School Involvement	Mania
Self-Management/Self-Control	Oppositional/Non-compliance
Social Skills	Peer/Sibling Conflict
Treatment Engagement	Phobia/Fears
	Pregnancy Education/Adjustment
	Psychosis
	Runaway
	School Refusal/Truancy
	Self-Injurious Behavior
	Sexual Misconduct
	Shyness
	Sleep Disturbance
	Speech/Language Problems
	Substance Abuse/Use
	Suicidality
	Traumatic Stress
	Willful Misconduct/Delinquency

*Note.* Targets are listed alphabetically.

Table 4.

*Results of Chi-squared Test of Independence for Demographic Variables by Discharge Status (n = 1841)*

Characteristic	Successful (n = 1402)	Unsuccessful (n = 439)	Chi square test
Gender <sup>a</sup>			
Female	488 (73.05)	180 (26.95)	$\chi^2 = 5.55; p = .02^*$
Ethnicity <sup>a</sup>			
American Indian or Alaska Native	5 (100)	0 (0)	$\chi^2 = 1.57; p = .21$
Asian	105 (73.43)	38 (26.57)	$\chi^2 = .64; p = .43$
Black	10 (88.33)	2 (16.67)	$\chi^2 = .34; p = .56$
Multiethnic	870 (75.92)	276 (24.08)	$\chi^2 = .10; p = .76$
Native Hawaiian or Other Pacific Islander	109 (66.87)	54 (33.13)	$\chi^2 = 8.49; p = .004^{**}$
White	155 (82.45)	33 (17.55)	$\chi^2 = 4.57; p = .03^*$
Unreported	148 (80.43)	36 (19.67)	$\chi^2 = 2.06; p = .15$
Diagnosis (Primary) <sup>a</sup>			
Adjustment	141 (80.11)	35 (19.89)	$\chi^2 = 1.68; p = .20$
Anxiety	69 (75)	23 (25)	$\chi^2 = .07; p = .79$
Attention Deficit/Hyperactivity	284 (81.38)	65 (18.62)	$\chi^2 = 6.46; p = .01^{**}$
Autism Spectrum	17 (85)	3 (15)	$\chi^2 = .87; p = .35$
Bipolar and Related	44 (75.86)	14 (24.14)	$\chi^2 = .003; p = .96$
Depressive	225 (74.50)	77 (25.50)	$\chi^2 = .54; p = .46$
Disruptive, Impulse-Control, and Conduct	354 (70.24)	150 (29.76)	$\chi^2 = 13.38; p < .001^{**}$
Intellectual Disabilities	3 (100)	0 (0)	$\chi^2 = .94; p = .33$
Obsessive-Compulsive and Related	5 (83.33)	1 (16.67)	$\chi^2 = .17; p = .68$
Posttraumatic Stress	93 (76.86)	28 (23.14)	$\chi^2 = .04; p = .85$
Schizophrenia Spectrum, Other Psychotic	24 (92.31)	2 (7.69)	$\chi^2 = 3.79; p = .05^*$
Substance-Related and Addictive	28 (66.67)	14 (33.33)	$\chi^2 = 2.13; p = .14$
Other Trauma- and Stressor-Related	24 (80)	6 (20)	$\chi^2 = .25; p = .62$
General Medical Conditions	38 (80.85)	9 (19.15)	$\chi^2 = .59; p = .44$

Note. \* $p < .05$  \*\* $p < .01$  <sup>a</sup>Represents frequencies and row percentages.

Table 5.

*Means, Standard Deviations, and T-tests for Discharge Status*

Variable	Successful Discharge		Unsuccessful Discharge		<i>t</i>
	<i>(n</i> = 1402)		<i>(n</i> = 439)		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Strengths Proportion (z-score)	.023	.99	-.07	1.03	-1.77* <sup>a</sup>
Episode Length (# of MTPSs)	10.62	7.81	8.57	7.06	-4.91**
Age in Years	12.04	3.99	13.23	3.51	5.62**

*Note.* <sup>a</sup>One-tailed t-test. <sup>\*\*</sup>p< 0.01. <sup>\*</sup> p< 0.05.

Table 6.

*Pearson and Point Biserial Correlations between Demographic Variables for the Total Sample (n = 1841)*

Variable	Discharge Status	Strengths Proportion	Age	Gender	CAFAS	Treatment Length
Discharge Status	--					
Strengths Proportion	.04 <sup>a</sup>	--				
Age	-.13**	.23**	--			
Gender	-.06**	.09**	.17**	--		
CAFAS	-.18**	-.07**	.22**	.02	--	
Treatment Length	.11**	-.04	-.11**	-.02	.01	--
Multiracial	-.01	-.04	-.03	.01	.02	.04
Asian	-.02	.04	.14**	.02	.02	.08**
White	.05*	.01	-.04	-.01	.02	-.06*
Black	.01	-.01	.00	-.02	-.02	.03
American Indian or Alaska Native	.03	.004	-.00	-.02	-.00	.00
Native Hawaiian or Pacific Islander	-.07	.002	.04	-.01	-.01	.03
Race Unreported or Missing	.00	.03	-.07**	-.00	-.06*	-.12*
Adjustment <sup>b</sup>	.03	.03	-.10**	.47*	-.13**	-.01
Anxiety <sup>b</sup>	-.00	.00	.38	.06*	-.05	.03
Attention-Deficit/Hyperactivity <sup>b</sup>	.06**	-.07**	-.26**	-.17**	-.06*	.00
Autism Spectrum <sup>b</sup>	.02	.03	.3	-.05*	.05*	.00
Bipolar and Other Related <sup>b</sup>	-.00	.03	.07**	.00	.08**	.00
Depressive <sup>b</sup>	-.02	.09**	.23**	-.02	.00	-.01
Disruptive, Impulse Control, Conduct <sup>b</sup>	-.08**	.02	.05-	.03	.06**	.01
Posttraumatic Stress <sup>b</sup>	.00	-.03	-.05	.08*	-.03	.02
Intellectual Disability <sup>b</sup>	.02	-.002	-.01	-.03	-.04	-.03
Obsessive Compulsive <sup>b</sup>	.01	-.04	.01	-.00	.05*	.05*
Schizophrenia <sup>b</sup>	.05	.05*	.10**	-.02	.11**	.06*
Substance Use <sup>b</sup>	-.03	-.02	.12**	.01	.10**	-.03
Medical Condition <sup>b</sup>	.02	-.06**	-.05*	.01	.03	-.06*

*Note.* Variables are defined as follows: (1) Discharge Status (0 = unsuccessful 1 = successful), (2) Strengths Proportion z-score, (3) Age in Years (Grand Mean Centered), (4) Gender (0 = male, 1 = female), (5) CAFAS total score, (6) Length of Treatment (number of MTPSs in episode) (7) Race (0= no, 1 = yes). CAFAS = Child and Adolescent Functional Assessment Scale, (8) <sup>b</sup>Diagnoses (0 = no, 1 = yes). \*\*p< 0.01. \* p< 0.05.

<sup>a</sup>One-tailed test.



Table 7.

*Significant Predictors of Successful Discharge Likelihood Using Multilevel Modeling.*

Fixed Effects	$\beta$	S.E.	t	df	Sig.	Odds Ratio	95% C.I. for Odds Ratio	
							Lower	Upper
Intercept	1.10	.29	3.87	1834	<.001	3.01	1.72	5.27
Strength Proportion (z-score)	.19	.06	2.97	1834	.003	1.21	1.07	1.37
CAFAS > 140	-1.06	.32	-3.29	1834	.001	.35	.19	.66
CAFAS 100-130	-.62	.29	-2.16	1834	.03	.54	.31	.95
Number of MTPSs	.05	.01	4.67	1834	<.001	1.05	1.03	1.07
Age (Grand Mean Centered)	-.07	.02	-3.99	1834	<.001	.94	.90	.97

Table 8.

*Random Effect Covariance of Successful Discharge Likelihood Using Multilevel Modeling*

Random Effects	$\beta$	S.E.	Z-score	Sig.	95% C.I.	
					Lower	Upper
Therapist (Intercept)	.39	.11	3.53	<.001	.23	.69

Table 9.

*Results of Chi-squared Test of Independence for Treatment Targets by Discharge Status (n = 1841)*

Treatment Target <sup>a</sup>	Successful (n = 1402)	Unsuccessful (n = 439)
<b>Strength-Focused Treatment Targets</b>		
Adjustment to Change**	394 (83.70)	77 (16.30)
Assertiveness**	361 (83.40)	72 (16.60)
Personal Hygiene	73 (83.00)	15 (17.00)
Occupational Functioning/Stress	70 (82.35)	15 (17.64)
Peer Involvement**	268 (82.00)	59 (18.00)
Social Skills**	581 (81.60)	131 (18.40)
Self-Management/Self-Control	216 (79.70)	55 (20.30)
Empathy	161 (79.7)	41 (20.30)
Contentment/Enjoyment/Happiness*	472 (79.20)	124 (20.80)
Community Involvement	319 (78.80)	86 (21.20)
Positive Thinking/Attitude	545 (78.4)	150 (21.60)
Adaptive Behavior/Living Skills	199 (78.00)	56 (22.00)
Academic Achievement	585 (77.90)	166 (22.10)
Medical Regimen Adherence	165 (77.80)	47 (22.20)
Positive Peer Interaction**	1220 (77.30)	359 (22.70)
Activity Involvement	862 (76.90)	259 (23.10)
School Involvement	413 (76.90)	124 (23.10)
Positive Family Functioning	138 (76.70)	42 (23.30)
Health Management	137 (75.30)	45 (24.70)
Treatment Engagement**	592 (70.30)	250 (29.70)
<b>Other Treatment Targets</b>		
Fire Setting	10 (90.90)	71 (9.10)
Psychosis	38 (90.50)	4 (9.50)
Shyness	47 (85.50)	8 (14.50)
Speech/Language Problems	23 (85.20)	4 (14.80)
Enuresis/Encopresis	57 (83.80)	11 (16.20)
Peer/Sibling Conflict**	563 (81.70)	126 (18.30)
Hyperactivity*	219 (81.40)	50 (18.60)
Anxiety**	644 (80.70)	154 (19.30)
Pregnancy Education/Adjustment	29 (80.60)	7 (19.40)
Phobias/Fears**	503 (80.50)	122 (19.50)
Attention Problems**	401 (80.50)	97 (19.50)
Sleep Disturbance	48 (80.00)	12 (20.00)
Traumatic Stress	186 (78.50)	51 (21.50)
Self-Injurious Behavior	471 (78.20)	131 (21.80)

Eating/Feeding Problems	52 (77.60)	15 (22.40)
Grief	118 (77.10)	35 (22.90)
Aggression	626 (77.00)	187 (23.00)
Oppositional/Non-compliance	951 (76.8)	287 (23.20)
Low Self-Esteem	440 (76.80)	133 (23.20)
Anger	792 (76.60)	242 (23.40)
Mania	13 (76.50)	4 (23.50)
Cognitive-Intellectual Functioning	139 (76.00)	44 (24.00)
Depressed Mood	544 (75.90)	173 (24.10)
Housing/Living Situation	195 (75.60)	63 (24.40)
Suicidality	81 (73.00)	30 (27.00)
Sexual Misconduct	50 (72.50)	19 (27.50)
Avoidance**	304 (70.40)	128 (29.60)
Learning Disorder/Underachievement	52 (70.30)	22 (29.70)
Willful Misconduct/Delinquency**	172 (68.80)	78 (31.20)
Gender Identity Problems	11 (68.80)	5 (31.30)
School Refusal/Truancy**	230 (64.40)	127 (35.60)
Substance Abuse/Use**	224 (62.20)	136 (37.80)
Runaway**	108 (52.20)	99 (47.80)

Note. \* $p < .05$  \*\* $p < .01$  <sup>a</sup>Represents frequencies and row percentages.

## Figures

Figure 1. Consort flowchart of decisions in selecting the final sample.

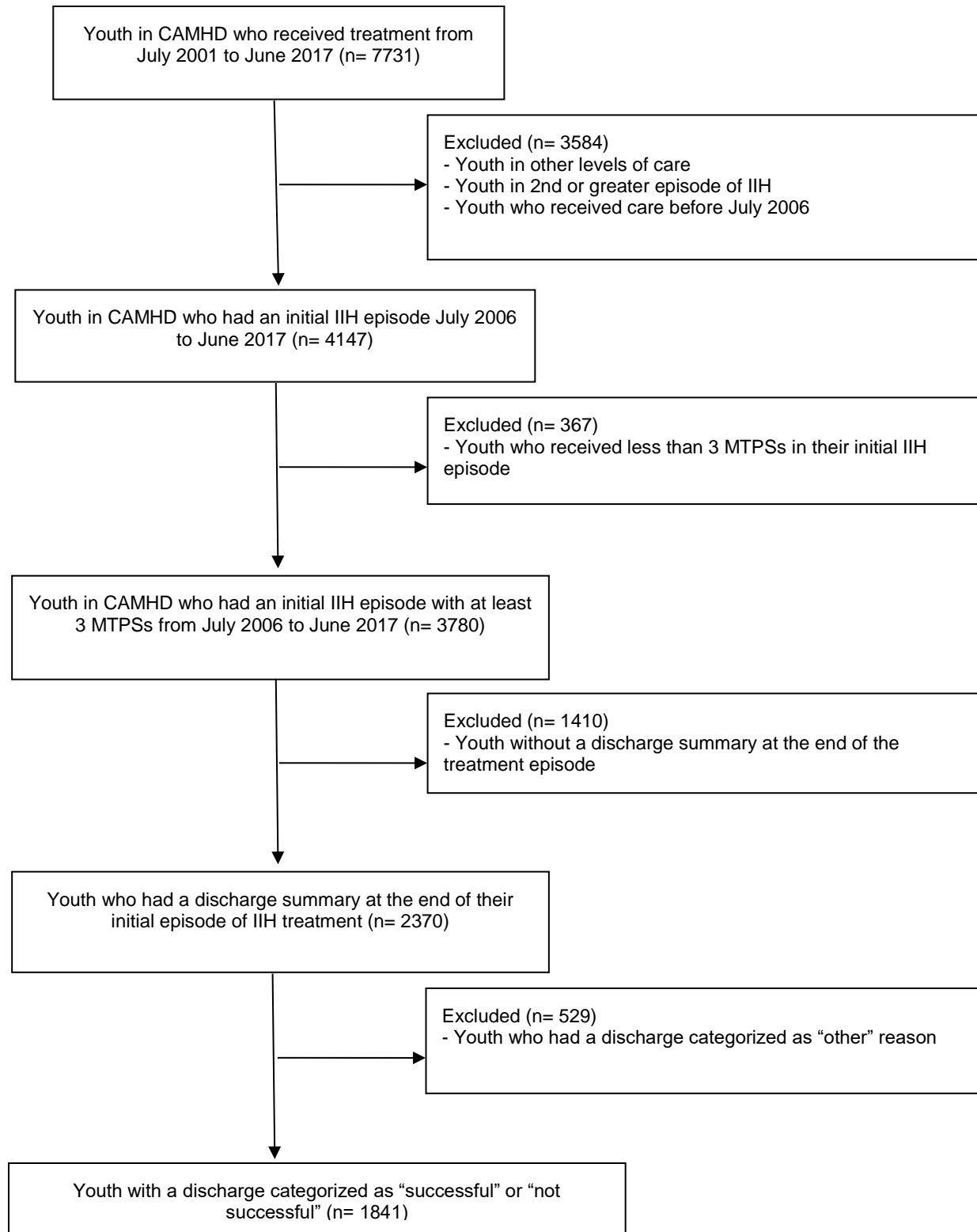
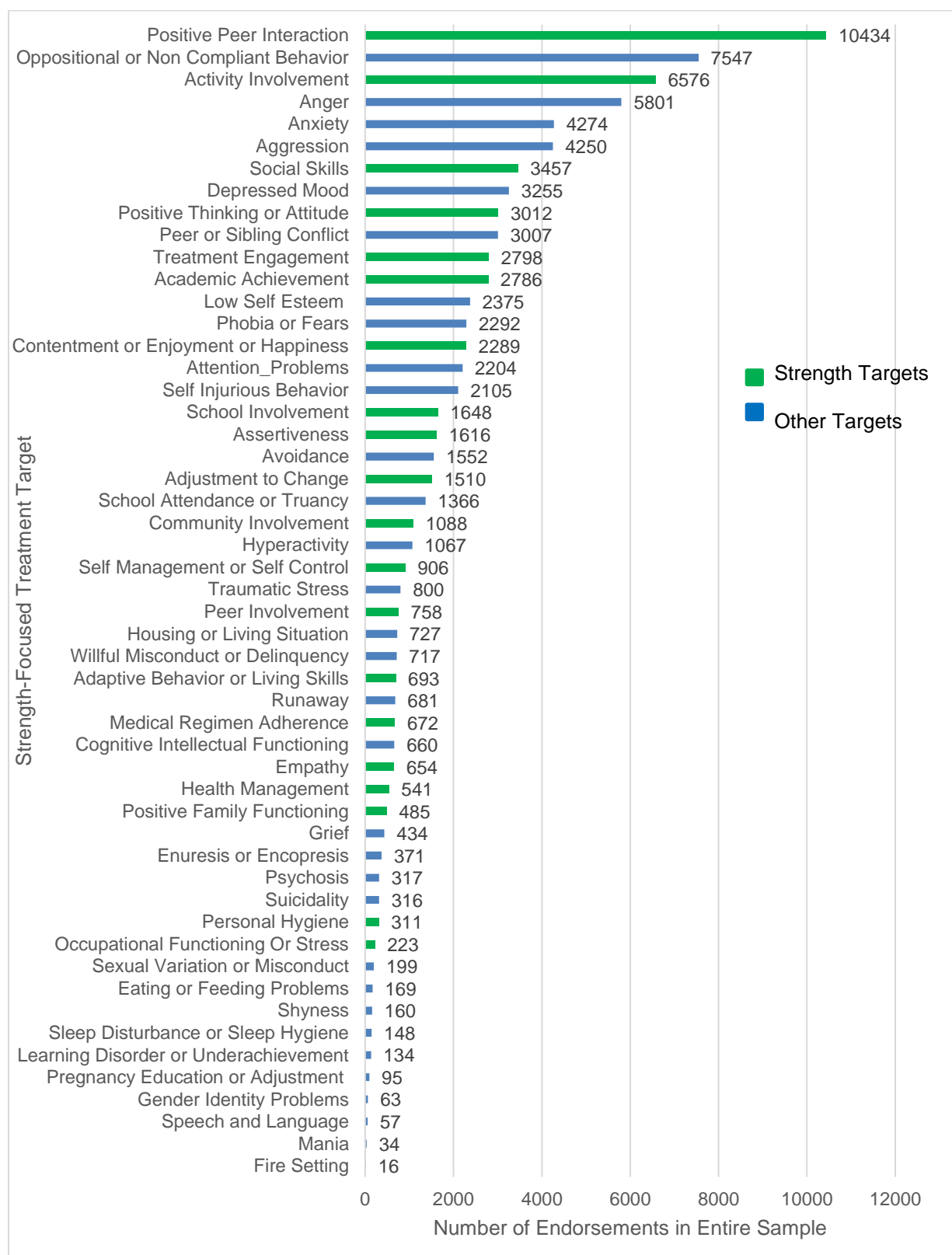


Figure 2. Frequency of strength-focused treatment targets.



## Appendix A

### Monthly Treatment and Progress Summary (MTPS) Form (2008)

#### SERVICE PROVIDER MONTHLY TREATMENT & PROGRESS SUMMARY Child and Adolescent Mental Health Division (CAMHD)

**Instructions:** Please complete and electronically submit this form to CAMHD by the 5<sup>th</sup> working day of each month (summarizing the time period of 1<sup>st</sup> to the last day of the previous month). The information will be used in service review, monitoring, planning and coordination in accordance with CAMHD policies and standards. Mahalo!

Client Name:	CR #:	DOB:
Month/Year of Services:	Eligibility Status:	Level of Care (one per form):
Axis I Primary Diagnosis:	Axis I Secondary Diagnosis:	Axis I Tertiary Diagnosis:
Axis II Primary Diagnosis:	Axis II Secondary Diagnosis:	

**Service Format (circle all that apply):**

Individual      Group      Parent      Family      Teacher      Other: \_\_\_\_\_

**Service Setting (circle all that apply):**

Home      School      Community      Out of Home      Clinic/Office      Other: \_\_\_\_\_

Service Dates:																
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**Targets Addressed This Month (number up to 10):**

	Activity Involvement	Community Involvement	Hyperactivity	Positive Peer Interaction	Shyness
	Academic Achievement	Contentment, Enjoyment, Happiness	Learning Disorder, Underachievement	Phobia/Fears	Sleep Disturbance
	Adaptive Behavior/Living Skills	Depressed Mood	Low Self-Esteem	Positive Thinking/Attitude	Social Skills
	Adjustment to Change	Eating, Feeding Problems	Mania	Pregnancy Education/Adjustment	Speech and Language Problems
	Aggression	Empathy	Medical Regimen Adherence	Psychosis	Substance Use
	Anger	Enuresis, Encopresis	Occupational Functioning/Stress	Runaway	Suicidality
	Anxiety	Fire Setting	Oppositional/Non-Compliant Behavior	School Involvement	Traumatic Stress
	Assertiveness	Gender Identity Problems	Peer Involvement	School Refusal/Truancy	Treatment Engagement
	Attention Problems	Grief	Peer/Sibling Conflict	Self-Control	Willful Misconduct, Delinquency
	Avoidance	Health Management	Personal Hygiene	Self-Injurious Behavior	Other:
	Cognitive-Intellectual Functioning	Housing/Living Situation	Positive Family Functioning	Sexual Misconduct	Other:

CR # \_\_\_\_\_ (please repeat the number here)

**Progress Ratings This Month (check appropriate rating for any target numbers endorsed as targets):**

#	Deterioration < 0%	No Significant Changes 0%-10%	Minimal Improvement 11%-30%	Some Improvement 31%-50%	Moderate Improvement 51%-70%	Significant Improvement 71%-90%	Complete Improvement 91%-100%	Date (If Complete)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

**Intervention Strategies Used This Month (check all that apply):**

Activity Scheduling	Emotional Processing	Line of Sight Supervision	Personal Safety Skills	Stimulus or Antecedent Control
Assertiveness Training	Exposure	Maintenance or Relapse Prevention	Physical Exercise	Supportive Listening
Attending	Eye Movement, Tapping	Marital Therapy	Play Therapy	Tangible Rewards
Behavioral Contracting	Family Engagement	Medication/ Pharmacotherapy	Problem Solving	Therapist Praise/Rewards
Biofeedback, Neurofeedback	Family Therapy	Mentoring	Psychoeducation, Child	Thought Field Therapy
Care Coordination	Free Association	Milieu Therapy	Psychoeducation, Parent	Time Out
Catharsis	Functional Analysis	Mindfulness	Relationship or Rapport Building	Twelve-Step Program
Cognitive	Goal Setting	Modeling	Relaxation	Other:
Commands	Guided Imagery	Motivational Interviewing	Response Cost	Other:
Communication Skills	Hypnosis	Natural and Logical Consequences	Response Prevention	Other:
Crisis Management	Ignoring/Differential Reinforcement of Other Behavior	Parent Coping	Self-Monitoring	
Cultural Training	Individual Therapy for Caregiver	Parent/Teacher Monitoring	Self-Reward/ Self-Praise	
Discrete Trial Training	Insight Building	Parent/Teacher Praise	Skill Building	
Educational Support	Interpretation	Peer Pairing	Social Skills Training	

CR # \_\_\_\_\_ (please repeat the number here)

Psychiatric Medications (List All)	Total Daily Dose	Dose Schedule	Check if Change	Description of Change
_____	_____	_____	<input type="checkbox"/>	_____
_____	_____	_____	<input type="checkbox"/>	_____
_____	_____	_____	<input type="checkbox"/>	_____
_____	_____	_____	<input type="checkbox"/>	_____
_____	_____	_____	<input type="checkbox"/>	_____

Projected Discharge Date: \_\_\_\_\_ ☐ Check if Discharged During Current Month

**IF YOUTH WAS DISCHARGED THIS MONTH, PLEASE COMPLETE ITEMS A & B:**

**A. Discharge Living Situation (check one):**

☐ Home
 ☐ Foster Home
 ☐ Group Care
 ☐ Residential Treatment  
☐ Institution/Hospital
 ☐ Jail/Correctional Facility
 ☐ Homeless/Shelter
 ☐ Other: \_\_\_\_\_

**B. Reason(s) for Discharge (check all that apply):**

☐ Success/Goals Met
 ☐ Insufficient Progress
 ☐ Family Relocation  
☐ Runaway/Elopement
 ☐ Refuse/Withdraw
 ☐ Eligibility Change
 ☐ Other: \_\_\_\_\_

**Outcome Measures:** Optional. If you have any of the following data, please report the most recent scores:

CAFAS (8 Scales): (1-School: ) (2-Home: ) (3-Community: ) (4-Behavior Toward Others: )				Date:
(5-Moods/Emotions: ) (6-Self-Harm: ) (7-Substance: ) (8-Thinking: ) (Total: )				
CASII/CALOCUS (Total):		CASII/CALOCUS (Level of Care):		Date:
CBCL (Total Problems T):		CBCL (Internalizing T):	CBCL (Externalizing T):	Date:
YSR (Total Problems T):		YSR (Internalizing T):	YSR (Externalizing T):	Date:
TRF (Total Problems T):		TRF (Internalizing T):	TRF (Externalizing T):	Date:
Arrested During Month? (Y/N):		School attendance (% of days):		

**Comments/Suggestions** (attach additional sheets if necessary):

Provider Agency & Island: _____	Clinician Name and ID#: _____
Provider Supervisor Signature: _____	Clinician Signature: _____
Submitted to CAMHD (date): _____	Care Coordinator: _____



**Appendix B**  
**Monthly Treatment Progress Summary (2008) Instructions and Codebook**  
**DOH Child and Adolescent Mental Health Division**  
**Instructions and Codebook for Provider Monthly Treatment and Progress Summary**  
**Effective July 1, 2008**

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*The instructions and codebook are to be used in conjunction with the CAMHD Service Provider Monthly Treatment and Progress Summary form. This codebook defines the numerous terms and possible responses necessary to accurately complete the form. For questions regarding these definitions or the use of the Monthly Treatment and Progress Summary, please contact the Clinical Services Office at 733-9349.*

**Instructions**

Please complete and electronically submit to CAMHD the Monthly Treatment and Progress Summary by the 5<sup>th</sup> working day of the month. The summary should pertain to the previous month's services. This form should be completed by the clinician who is most familiar with the current status of the youth and family and with the services provided during the month. When necessary, the responding clinician should gather information from other provider team members to assure the most accurate description possible. Once completed by the clinician, the form should be reviewed and signed by a qualified supervisor.

At the top section, please write the Client Name, CR Number, Date of Birth (DOB), Home School, School Complex, Eligibility Status [i.e., Educationally Supportive (IDEA), Support for Emotional and Behavioral Development (SEBD), Mental Health Only], Axis I Primary Diagnosis, Axis I Secondary Diagnosis, Axis I Tertiary Diagnosis, Axis II Primary Diagnosis, Axis II Secondary Diagnosis, Level of Care, and Month/Year of Services. If some Diagnosis fields do not apply to the youth, please leave those fields blank. The Month/Year of Services refers to the month in which the service was provided, not the date the Monthly Provider Summary was completed. For example, if the report is submitted in the first week of June, the Month/Year of Services would read "May," because the services were delivered in May. For youth receiving more than one level of care during the month, please complete a separate form for each.

Under Service Format, please indicate whether services were delivered in the following manner (more than one format can be selected):

- Individual –Working with youth directly
- Group –Working with youth along with other youths receiving services
- Parent –Working directly with parents or caregivers, with youth not present
- Family – Working with parents or caregivers and youth together. Can include other family members
- Teacher – Working with a teacher directly
- Other – Another format not specified above; please write description

Under Service Setting, please note whether services were delivered in the following locations (more than one setting can be selected):

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Home – Working with youth or family members in the youth’s home  
School – Working with youth or professionals in the youth’s educational setting, other than in the context of an IEP/MP meeting  
Community – Working with youth or others in the youth’s community/neighborhood  
Out of Home – Working with the youth or family in a residential facility  
Clinic/Office – Working with the youth or family in a clinical office  
Other – Another setting not specified above; please write description

For Service Dates, please provide the dates for each service provided during that month. If additional space is required, please continue writing dates in the area below the boxes provided. If the service was provided out of home (i.e., continuously), please provide start and end dates for that month’s services and put the word “to” in between in one of the boxes.

### Targets

Targets are the strengths and needs being addressed as part of the mental health services for that youth.

When completing the Targets Addressed This Month, please put numbers (1, 2, 3...) rather than checkmarks (X, ✓) to the left of each target addressed. This is so that progress ratings in the next section can be attached to each target. For example, if “Academic Achievement” was targeted, place a “1” in the box to the left of that target on the form. Numbers do not need to reflect any particular order. If more than 10 targets were addressed during the month, please provide only those you feel are the 10 most important. If a target was addressed for which there is no option, please number the “other” box, and write in the target.

The list of treatment targets is intended to provide a summary of strengths and needs that are commonly targeted for change during mental health service provision. These problem areas are NOT diagnostic descriptions and the primary targets for treatment may change over time for a particular youth. For example, when treating a youth with an eating disorder, treatment may target eating/feeding behavior at one point, but target medical regimen adherence or positive family functioning on other occasions. These treatment targets are for progress summary purposes and should NOT replace the detailed specification of goals and objectives as part of the treatment planning process.

### Definitions of Targets

1. **Academic Achievement** – Issues related to general level or quality of achievement in an educational or academic context. This commonly includes performance in coursework, and excludes cognitive-intellectual ability/capacity issues (#11) and specific challenges in learning or achievement (#24)
2. **Activity Involvement** – Issues related to general engagement and participation in activities. Only code here those activities that are not better described by the particular activity classes of school involvement (#40), peer involvement (#30), or community involvement (#12).
3. **Adaptive Behavior/Living Skills** – Skills related to independent living, social functioning, financial management, and self-sufficiency that are not better captured under other codes

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such as personal hygiene (#33), self-management/self-control (#43), social skills (#47), housing/living situation (#22), or occupational functioning/stress (#28).

4. **Adjustment to Change** – Issues related to a youth’s global response to a life transition or specific challenge (e.g., change of school, living situation, treatment transition or discharge, etc.).
5. **Aggression** – Verbal and/or physical aggression, or threat thereof, that results in intimidation, physical harm, or property destruction.
6. **Anger** – Emotional experience or expression of agitation or destructiveness directed at a particular object or individual. Common physical feelings include accelerated heartbeat, muscle tension, quicker breathing, and feeling hot.
7. **Anxiety** – A general uneasiness that can be characterized by irrational fears, panic, tension, physical symptoms, excessive anxiety, worry, or fear.
8. **Assertiveness** – The skills or effectiveness of clearly communicating one’s wishes. For example, the effectiveness with which a child refuses unreasonable requests from others, expresses his/her rights in a non-aggressive manner, and/or negotiates to get what s/he wants in their relationships with others.
9. **Attention Problems** – Described by short attention span, difficulty sustaining attention on a consistent basis, and susceptible to distraction by extraneous stimuli.
10. **Avoidance** – Behaviors aimed at escaping or preventing exposure to a particular situation or stimulus.
11. **Cognitive-Intellectual Functioning** – Issues related to cognitive-intellectual ability/capacity and use of those abilities for positive adaptation to the environment. This includes efforts to increase IQ, memory capacity, or abstract problem-solving ability.
12. **Community Involvement** – Issues related to the amount of involvement in specific community activities within the child’s day.
13. **Contentment/Enjoyment/Happiness** – Refers to issues involving the experience and expression of satisfaction, joy, pleasure, and optimism for the future.
14. **Depressed Mood** – Behaviors that can be described as persistent sadness, anxiety, or "empty" mood, feelings of hopelessness, guilt, worthlessness, helplessness, decreased energy, fatigue, etc.
15. **Eating/Feeding Problems** – Knowledge or behaviors involved with the ingestion or consumption of food. May include nutritional awareness, food choice, feeding mechanics (e.g., swallowing, gagging, etc.), and social factors relating with eating situations.
16. **Empathy** – Identifications with and understanding of another person’s situation, feelings, and motives.
17. **Enuresis/Encopresis** – Enuresis refers to the repeated pattern of voluntarily or involuntarily passing urine at inappropriate places during the day or at night in bed or clothes. Encopresis refers to a repeated pattern of voluntarily or involuntarily passing feces in inappropriate places.
18. **Fire Setting** – Intentionally igniting fires.
19. **Gender Identity Problems** – Issues related with a youth’s self-concept or self-understanding involving gender roles and social behaviors in relation to their biological sex. This does not address self-concept issues involving sexual orientation, which would be coded as “other.”
20. **Grief** – Feelings associated with a loss of contact with a significant person in the youth’s environment (e.g., parent, guardian, friend, etc.).

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21. **Health Management** – Issues related to the improvement or management of one’s health, inclusive of both physical illness and fitness. In addition to dealing with the general development of health-oriented behavior and management of health conditions, this target can also focus on exercise or lack of exercise.
22. **Housing/Living Situation** – Refers to finding or stabilizing an appropriate living situation for a youth.
23. **Hyperactivity** – Can be described by fidgeting, squirming in seat, inability to remain seated, talking excessively, difficulty engaging in leisure activities quietly, etc.
24. **Learning Disorder, Underachievement** – Refers to specific challenges with learning or educational performance that are not better accounted for by cognitive-intellectual functioning (#11) or general academic achievement (#1).
25. **Low Self-Esteem** – An inability to identify or accept his/her positive traits or talents, and accept compliments. Verbalization of self-disparaging remarks and viewing him or herself in a negative manner.
26. **Mania** – An inflated self-perception that can be manifested by loud, overly friendly social style that oversteps social boundaries, and high energy and restlessness with a reduced need for sleep.
27. **Medical Regimen Adherence** – Knowledge, attitudes, and behaviors related to regular implementation procedures prescribed by a health care professional. Commonly include lifestyle behaviors (e.g., exercise, nutrition), taking medication, or self-administration of routine assessments (e.g., taking blood samples in a diabetic regimen).
28. **Occupational Functioning/Stress** – Issues related to career interests, seeking employment, obtaining work permits, job performance, or managing job stress or strain that are not better characterized under other targets (e.g., anxiety).
29. **Oppositional/Non-Compliant Behavior** – Behaviors that can be described as refusal to follow adult requests or demands or established rules and procedures (e.g., classroom rules, school rules, etc.).
30. **Peer Involvement** – A greater involvement in activities with peers. Activities could range from academic tasks to recreational activities while involvement could range from working next to a peer to initiating an activity with a peer.
31. **Peer/Sibling Conflict** – Peer and/or sibling relationships that are characterized by fighting, bullying, defiance, revenge, taunting, incessant teasing and other inappropriate behaviors.
32. **Phobia/Fears** – Irrational dread, fear, and avoidance of an object, situation, or activity.
33. **Personal Hygiene** – Challenges related to self-care and grooming.
34. **Positive Family Functioning** – Issues related with healthy communication, problem-solving, shared pleasurable activities, physical and emotional support, etc. in the context of an interaction among multiple persons in a family relation, broadly defined.
35. **Positive Peer Interaction** – Social interaction and communication with peers that are pro-social and appropriate. This differs from peer involvement (#30) in that it focuses on interactional behavior, styles, and intentions, whereas peer involvement targets actual engagement in activities with peers regardless of interactional processes.
36. **Positive Thinking/Attitude** – This target involves clear, healthy, or optimistic thinking, and involves the absence of distortions or cognitive bias that might lead to maladaptive behavior.
37. **Pregnancy Education/Adjustment** – Issues related to helping a pregnant youth prepare and adjust to parenthood.

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38. **Psychosis** – Issues related to atypical thought content (delusions of grandeur, persecution, reference, influence, control, somatic sensations), and/or auditory or visual hallucinations.
39. **Runaway** – Running away from home or current residential placement for a day or more.
40. **School Involvement** – Detailed description of amount of involvement in specific school activities within the child’s scheduled school day.
41. **School Refusal/Truancy** – Reluctance or refusal to attend school without adult permission for the absence. May be associated with school phobia or fear manifested by frequent somatic complaints associated with attending school or in anticipation of school attendance, or willful avoidance of school in the interest of pursuing other activities.
42. **Self-Injurious Behavior** – Acts of harm, violence, or aggression directed at oneself.
43. **Self-Management/Self-Control** – Issues related to management, regulation, and monitoring of one’s own behavior.
44. **Sexual Misconduct** – Issues related with sexual conduct that is defined as inappropriate by the youth’s social environment or that includes intrusion upon or violation of the rights of others.
45. **Shyness** – Social isolation and/or excessive involvement in isolated activities. Extremely limited or no close friendships outside the immediate family members. Excessive shrinking or avoidance of contact with unfamiliar people.
46. **Sleep Disturbance** – Difficulty getting to or maintaining sleep.
47. **Social Skills** – Skills for managing interpersonal interactions successfully. Can include body language, verbal tone, assertiveness, and listening skills, among other areas.
48. **Speech and Language Problems** – Expressive and/or receptive language abilities substantially below expected levels as measured by standardized tests.
49. **Substance Abuse/Substance Use** – Issues related to the use or misuse of a common, prescribed, or illicit substances for altering mental or emotional experience or functioning.
50. **Suicidality** – Issues related to recurrent thoughts, gestures, or attempts to end one’s life.
51. **Traumatic Stress** – Issues related to the experience or witnessing of life events involving actual or threatened death or serious injury to which the youth responded with intense fear, helplessness, or horror.
52. **Treatment Engagement** – The degree to which a family or youth is interested and optimistic about an intervention or plan, such that they act willfully to participate and work toward the success of the plan.
53. **Willful Misconduct/Delinquency** – Persistent failure to comply with rules or expectations in the home, school, or community. Excessive fighting, intimidation of others, cruelty or violence toward people or animals, and/or destruction of property.

### Progress Ratings

Please provide a single progress rating for each target selected above (up to 10). Numbers 1 through 10 in the left column refer to the targets selected in the Targets Addressed This Month section above. For example, had you selected “Academic Achievement” above, there would be a “1” in the box to the left of that target on that section. Then, the first row of the Progress Ratings, labeled “1,” is where you would note the progress ratings associated with academic achievement.

Please place a mark (X, ✓) in the column corresponding to your subjective rating of progress associated with this target. When possible, your overall subjective ratings should be informed by

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a review of objective measures such as any available and relevant questionnaires or behavioral observation data. For example, if a youth receives a T-score of 70 during an intake assessment and the treatment goal is to reduce this score to 60, then if a youth receives a T-score of 65 during a monthly assessment, then 50% progress may be reported [i.e.,  $70 - 65 / 70 - 60 = 5 / 10 = 50\%$ ]. Or if a youth gets into 10 fights per week initially and the treatment goal is to reduce fighting to 0 fights per week, then during a month in which the youth was fighting only 3 times per week, that would reflect 70% progress [i.e.,  $10 - 3 / 10 - 0 = 7 / 10 = 70\%$ ].

**Anchors refer to changes from baseline or beginning of services for that target.** Thus, a youth who had reached 90% of an initial goal would receive a rating of “significant improvement.” If that progress were to decline to 70% in the following month, the youth would then get a rating of “moderate improvement” for that target for that month (not “deterioration”). “Deterioration” refers to when a target gets worse from the time it was initially addressed. If there is a break in addressing a specific target (e.g., a target is addressed, then not addressed for a month, then addressed again in a later month), use the initial baseline from the first time as the point of comparison. Only when there is a break in the complete episode of care (i.e., discharge followed by later admission), should that reset the baseline for a given target.

If a goal is reached (improvement is complete), the provider may choose to note the date in the rightmost column. This implies that the target is no longer being addressed. Targets that are not complete should be rated again on the following month’s summary form.

### Intervention Strategies

Please place a mark (X, ✓) to the left of any intervention strategies used during the past month. There is no limit to how many may be checked. If strategies were employed that are not in the following list of definitions, please mark the “other” box and write in the strategy used.

### Definitions of Intervention Strategies

1. **Activity Scheduling** – The assignment or request that a child participate in specific activities outside of therapy time, with the goal of promoting or maintaining involvement in satisfying and enriching experiences.
2. **Assertiveness Training** – Exercises or techniques designed to promote the child’s ability to be assertive with others, usually involving rehearsal of assertive interactions.
3. **Attending** – Exercises involving the youth and caregiver playing together in a specific manner to facilitate their improved verbal communication and nonverbal interaction. Can involve the caregiver’s imitation and participation in the youth’s activity, as well as parent-directed play (previously called “Directed Play”).
4. **Behavioral Contracting** – Development of a formal agreement specifying rules, consequences, and a commitment by the youth and relevant others to honor the content of the agreement.
5. **Biofeedback/ Neurofeedback** – Strategies to provide information about physiological activity that is typically below the threshold of perception, often involving the use of specialized equipment.

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6. **Care Coordination** – Coordinating among the youth’s service providers to ensure effective communication, receipt of appropriate services, adequate housing, etc.
7. **Catharsis** – Strategies designed to bring about the release of intense emotions, with the intent to develop mastery of affect and conflict.
8. **Cognitive** – Any techniques designed to alter interpretation of events through examination of the child’s reported thoughts, typically through the generation and rehearsal of alternative counter-statements. This can sometimes be accompanied by exercises designed to comparatively test the validity of the original thoughts and the alternative thoughts through the gathering or review of relevant information.
9. **Commands** – Training for caregivers in how to give directions and commands in such a manner as to increase the likelihood of child compliance.
10. **Communication Skills** – Training for youth or caregivers in how to communicate more effectively with others to increase consistency and minimize stress. Can include a variety of specific communication strategies (e.g., active listening, “I” statements).
11. **Crisis Management** – Immediate problem solving approaches to handle urgent or dangerous events. This might involve defusing an escalating pattern of behavior and emotions either in person or by telephone, and is typically accompanied by debriefing and follow-up planning.
12. **Cultural Training** – Education or interaction with culturally important values, rituals, or sites with no specific practices identified.
13. **Discrete Trial Training** – A method of teaching involving breaking a task into many small steps and rehearsing these steps repeatedly with prompts and a high rate of reinforcement.
14. **Educational Support** – Exercises designed to assist the child with specific academic problems, such as homework or study skills. This includes tutoring.
15. **Emotional Processing** – A program based on an information processing model of emotion that requires activation of emotional memories in conjunction with new and incompatible information about those memories.
16. **Exposure** – Techniques or exercises that involve direct or imagined experience with a target stimulus, whether performed gradually or suddenly, and with or without the therapist’s elaboration or intensification of the meaning of the stimulus.
17. **Eye Movement/ Tapping** – A method in which the youth is guided through a procedure to access and resolve troubling experiences and emotions, while being exposed to a therapeutic visual or tactile stimulus designed to facilitate bilateral brain activity.
18. **Family Engagement** – The use of skills and strategies to facilitate family or child’s positive interest in participation in an intervention.
19. **Family Therapy** – A set of approaches designed to shift patterns of relationships and interactions within a family, typically involving interaction and exercises with the youth, the caregivers, and sometimes siblings.
20. **Free Association** – Technique for probing the unconscious in which a person recites a running commentary of thoughts and feelings as they occur.
21. **Functional Analysis** – Arrangement of antecedents and consequences based on a functional understanding of a youth’s behavior. This goes beyond straightforward application of other behavioral techniques.
22. **Goal Setting** – Setting specific goals and developing commitment from youth or family to attempt to achieve those goals (e.g., academic, career, etc.).

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23. **Guided Imagery** – Visualization or guided imaginal techniques for the purpose of mental rehearsal of successful performance. Guided imagery for the purpose of physical relaxation (e.g., picturing calm scenery) is not coded here, but rather coded under relaxation (#50).
24. **Hypnosis** – The induction of a trance-like mental state achieved through suggestion.
25. **Ignoring/Differential Reinforcement of Other Behavior** – The training of parents or others involved in the social ecology of the child to selectively ignore mild target behaviors and selectively attend to alternative behaviors.
26. **Individual Therapy for Caregiver** – Any therapy designed directly to target individual (non-dyadic) psychopathology in one or more of the youth's caregivers. If the therapy for caregivers involves marital therapy (#31) or communication skills (#10) those are not coded here, unless there are additional services for individual caregiver psychopathology, in which case all that apply should be coded.
27. **Insight Building** – Activity designed to help a youth achieve greater self-understanding.
28. **Interpretation** – Reflective discussion or listening exercises with the child designed to yield therapeutic interpretations. This does not involve targeting specific thoughts and their alternatives, which would be coded as cognitive/coping.
29. **Line of Sight Supervision** – Direct observation of a youth for the purpose of assuring safe and appropriate behavior.
30. **Maintenance/Relapse Prevention** – Exercises and training designed to consolidate skills already developed and to anticipate future challenges, with the overall goal to minimize the chance that gains will be lost in the future
31. **Marital Therapy** – Techniques used to improve the quality of the relationship between caregivers.
32. **Medication/ Pharmacotherapy** – Any use of psychotropic medication to manage emotional, behavioral, or psychiatric symptoms.
33. **Mentoring** – Pairing with a more senior and experienced individual who serves as a positive role model for the identified youth.
34. **Milieu Therapy** – A therapeutic approach in residential settings that involves making the environment itself part of the therapeutic program. Often involves a system of privileges and restrictions such as a token or point system.
35. **Mindfulness** – Exercises designed to facilitate present-focused, non-evaluative observation of experiences as they occur, with a strong emphasis of being “in the moment.” This can involve the youth's conscious observation of feelings, thoughts, or situations.
36. **Modeling** – Demonstration of a desired behavior by a therapist, confederates, peers, or other actors to promote the imitation and subsequent performance of that behavior by the identified youth.
37. **Motivational Interviewing** – Exercises designed to increase readiness to participate in additional therapeutic activity or programs. These can involve cost-benefit analysis, persuasion, or a variety of other approaches.
38. **Natural and Logical Consequences** – Training for parents or teachers in (a) allowing youth to experience the negative consequences of poor decisions or unwanted behaviors, or (b) delivering consequences in a manner that is appropriate for the behavior performed by the youth.



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39. **Parent Coping** – Exercises or strategies designed to enhance caregivers’ ability to deal with stressful situations, inclusive of formal interventions targeting one or more caregiver.
40. **Parent/Teacher Monitoring** – The repeated measurement of some target index by the parent, teacher, or other adult involved in the child’s social ecology.
41. **Parent/Teacher Praise** – The training of parents, teachers, or other adults involved in the social ecology of the child in the administration of social rewards to promote desired behaviors. This can involve praise, encouragement, affection, or physical proximity.
42. **Peer Pairing** – Pairing with another youth of same or similar age to allow for reciprocal learning or skills practice.
43. **Personal Safety Skills** – Training for the youth in how to maintain personal safety of one’s physical self. This can include education about attending to one’s sense of danger, body ownership issues (e.g., “good touch-bad touch”), risks involved with keeping secrets, how to ask for help when feeling unsafe, and identification of other high-risk situations for abuse.
44. **Physical Exercise** – The engagement of the youth in energetic physical movements to promote strength or endurance or both. Examples can include running, swimming, weight-lifting, karate, soccer, etc. Note that when the focus of the physical exercise is also to produce talents or competence and not just physical activity and conditioning, the code for “Skill Building” (#55) can also be applied.
45. **Play Therapy** – The use of play as a primary strategy in therapeutic activities. This may include the use of play as a strategy for clinical interpretation. Different from Attending (#3), which involves a specific focus on modifying parent-child communication. This is also different from play designed specifically to build relationship quality (#49).
46. **Problem Solving** – Techniques, discussions, or activities designed to bring about solutions to targeted problems, usually with the intention of imparting a skill for how to approach and solve future problems in a similar manner.
47. **Psychoeducational-Child** – The formal review of information with the child about the development of a problem and its relation to a proposed intervention.
48. **Psychoeducational-Parent** – The formal review of information with the caregiver(s) about the development of the child’s problem and its relation to a proposed intervention. This often involves an emphasis on the caregiver’s role in either or both.
49. **Relationship/Rapport Building** – Strategies in which the immediate aim is to increase the quality of the relationship between the youth and the therapist. Can include play, talking, games, or other activities.
50. **Relaxation** – Techniques or exercises designed to induce physiological calming, including muscle relaxation, breathing exercises, meditation, and similar activities. Guided imagery exclusively for the purpose of physical relaxation is also coded here.
51. **Response Cost** – Training parents or teachers how to use a point or token system in which negative behaviors result in the loss of points or tokens for the youth.
52. **Response Prevention** – Explicit prevention of a maladaptive behavior that typically occurs habitually or in response to emotional or physical discomfort.
53. **Self-Monitoring** – The repeated measurement of some target index by the child.
54. **Self-Reward/Self-Praise** – Techniques designed to encourage the youth to self-administer positive consequences contingent on performance of target behaviors.

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55. **Skill Building** – The practice or assignment to practice or participate in activities with the intention of building and promoting talents and competencies.
56. **Social Skills Training** – Providing information and feedback to improve interpersonal verbal and non-verbal functioning, which may include direct rehearsal of the skills. If this is paired with peer pairing (#42), that should be coded as well.
57. **Stimulus/Antecedent Control** – Strategies to identify specific triggers for problem behaviors and to alter or eliminate those triggers in order to reduce or eliminate the behavior.
58. **Supportive Listening** – Reflective discussion with the child designed to demonstrate warmth, empathy, and positive regard, without suggesting solutions or alternative interpretations.
59. **Tangible Rewards** – The training of parents or others involved in the social ecology of the child in the administration of tangible rewards to promote desired behaviors. This can involve tokens, charts, or record keeping, in addition to first-order reinforcers.
60. **Therapist Praise/Rewards** – The administration of tangible (i.e., rewards) or social (e.g., praise) reinforcers by the therapist.
61. **Thought Field Therapy** – Techniques involving the tapping of various parts of the body in particular sequences or "algorithms" in order to correct unbalanced energies, known as thought fields.
62. **Time Out** – The training of or the direct use of a technique involving removing the youth from all reinforcement for a specified period of time following the performance of an identified, unwanted behavior.
63. **Twelve-Step Program** – Any programs that involve the twelve-step model for gaining control over problem behavior, most typically in the context of alcohol and substance use, but can be used to target other behaviors as well.

For medication interventions please list each psychiatric medication the youth is taking (e.g., Adderall ER), describe the prescribed total daily dose for each medication (e.g., 30 mg.), identify the prescribed dose schedule (e.g., 2x/week, 3x/day, 15-10-5/day, etc.), place a check mark in the appropriate box if there was a change in the medication or regimen during the reporting month, and provide a description of the change on the line to the right (e.g., new medication, daily dosage change from 10 to 30 mg, change in dose schedule from 5-5/day to 10-10-10/day, etc.).

For Projected End Date, please indicate the expected date for termination of the services for which this form was completed.

For Discharged During Month please indicate if the youth was discharged from your program during the reporting month. If the youth was discharged, please indicate the Living Situation that the youth was entering upon discharge and the Reason for Discharge. For Projected End Date, please indicate the expected date for termination of the services for which this form was completed.

## CAMHD Provider Monthly Summary Instructions and Codebook

### Living Situation upon Discharge

Please place a mark (X, ✓) to the left of statement that best describes the type of living environment in which the youth was expected to reside at the time of discharge. Please select only one option. If the youth's living situation at discharge is not well described by the following list of definitions, please mark the "other" box and write in the youth's living situation.

1. **Home** - Youth to live in a house, apartment, trailer, hotel, dorm, barrack, and/or single room occupancy. This excludes situations better characterized as foster homes.
2. **Foster Home**-Youth to reside in a foster home or therapeutic foster home. A foster home is a home that is licensed to provide foster care to children, adolescents, and/or adults.
3. **Group Care**-Youth to reside in a group care facility. This level of care may include a group home, therapeutic group home, or board and care. This excludes community-based residential and hospital-based residential care
4. **Residential Treatment**- Youth to reside in a community-based residential treatment, rehabilitation center, or other residential treatment that is not better characterized as a group home or institution/hospital facility. An organization, not licensed as a psychiatric hospital, whose primary purpose is the provision of individually planned programs of mental health treatment services in conjunction with residential care for children and youth. The services are provided in facilities that are certified by state or federal agencies or through a national accrediting agency.
5. **Institutional/Hospital**-Youth resides in an institutional care or hospital-based residential care facility with care provided on a 24 hour, 7 day a week basis. This level of care may include a skilled nursing/intermediate care facility, nursing homes, institutes of mental disease, inpatient psychiatric hospital, psychiatric health facility, Veterans Affairs hospital, or state hospital.
6. **Jail/Correctional Facility**-Youth resides in a Jail and/or Correctional facility with care provided on a 24 hour, 7 day a week basis. This level of care may include a jail, correctional facility, detention centers, prison, youth authority facility, juvenile hall, boot camp, or boys ranch.
7. **Homeless/Shelter**- A youth is considered homeless if s/he lacks a fixed, regular, and adequate nighttime residence or his/her primary nighttime residency is a supervised publicly or privately operated shelter designed to provide temporary living accommodations, an institution that provides a temporary residence for individuals intended to be institutionalized, or a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings (e.g., on the street). Youth who were discharged due to extended runaway or elopement episode should be recorded in this category.

### Reason(s) for Discharge

Please place a mark (X, ✓) to the left of each statement that describes the reasons for discharging youth from the program during the reporting month. There is no limit to how many may be checked. If the discharge reason is not well characterized by the following list of definitions, please mark the "other" box and write in the reason.

## CAMHD Provider Monthly Summary Instructions and Codebook

1. **Success/Goals Met**-Youth was clinically discharged due to sufficient treatment progress (e.g., symptoms reduced, functioning improved), treatment goals were met, youth was evaluated and services were determined unnecessary, services were completed, or youth was moving to a less restrictive and intensive level of care.
2. **Insufficient Progress**-Youth was discharged from service without showing sufficient treatment progress to be judged as clinically successful (i.e., little symptom reduction, improvement in functioning, or goal attainment was achieved).
3. **Family Relocation**-Youth was discharge because the youth and family moved out of state or out of the service area.
4. **Runaway/Elopement**-Youth was discharged in association with an extended period of unavailability for treatment because the youth had runaway from home or eloped from the program.
5. **Refuse/Withdraw**-Youth was discharged due to parental refusal, non-participation in treatment, lack of consent, or other indication that client withdrew from services against professional advice.
6. **Eligibility Change**-Youth was discharged in association with a change in eligibility for services, such as a termination of a court order or commitment, aging out of child and adolescent services, loss of Medicaid insurance, etc.

Please provide any other Comments or Suggestions for the youth's care coordinator you think would be important.

If scores are available on any of the Outcome Measures recommended in the Interagency Practice Guidelines, please provide them along with dates in the optional section provided. Include whether or not youth was arrested during the past month, and an estimate of the percentage of school days that were attended. If school is attended in a residential setting, this counts toward the percentage of days attended.

For the CAFAS, the numbered spaces refer to the following scales: 1-School, 2-Home, 3-Community, 4-Behavior Towards Others, 5-Moods/Emotions, 6-Self-Harm, 7-Substance, 8-Thinking. "Total" refers to the sum of these 8 scales.

Please write the name of the agency including location (e.g., Maui, Big Island) and name of the clinicians (along with CAMHMIS ID#) and provider, along with appropriate signatures of the clinician completing the form and the qualified supervisor. Note the date that the form was submitted electronically to CAMHD and provide name of Care Coordinator.

## **Appendix C**

### **Strength Treatment Target Codebook**

#### **CODING INSTRUCTIONS.**

##### **Please read all directions closely!**

Using the titles provided for each treatment target appearing on the Monthly Treatment Progress Summary (MTPS) and the definition of strength-focused treatment target provided below, please code each MTPS treatment target into one of the following two categories: strength-focused or other.

Please only choose one category for each treatment target definition.

#### **CODING CRITERIA.**

Mark a target strength-focused if you believe it is directly related to the following criteria of strength-focused treatment target:

A strength-focused treatment target is a treatment target in which the aim is to promote and/or enhance positive individual, family, and environmental factors (e.g. characteristics, attributes, repertoires, abilities, thoughts, skills, behaviors, or resources) in order to foster well-being and to reduce dysfunction.

If you do not think the treatment target is strength-focused based on the above definition, mark the target as other. Treatment targets that focus on improving a negative characteristic, whether you believe such a focus might eventually lead to the promotion or enhancement of positive factors, should not be coded as a “strength-focused” treatment target.

#### **Marking the Coding Sheet.**

In the two columns at the far right of the coding sheets, indicate with an “X” which category is most appropriate. If you believe a target is “strength-focused” write an “X” next to the definition under the strength column, and if you think the target is “other” write an “X” next to the definition in the other column.

Please only choose one category for each treatment target definition.

Continue coding until each target has been marked with an “X” in one of the columns  
Mahalo for your time!

### Definitions of Targets

<b>Treatment Target Definition</b>	<b>Strength-focused</b>	<b>Other</b>
<b>Academic Achievement</b> – Issues related to general level or quality of achievement in an educational or academic context. This commonly includes performance in coursework, and excludes cognitive-intellectual ability/capacity issues (#9) and specific challenges in learning or achievement (#21)		
<b>Activity Involvement</b> – Issues related to general engagement and participation in activities. Only code here those activities that are not better described by the particular activity classes of school involvement (#35), peer involvement (#26), or community involvement (#10).		
<b>Aggression</b> – Verbal and/or physical aggression, or threat thereof, that results in intimidation, physical harm, or property destruction.		
<b>Anger</b> – Emotional experience or expression of agitation or destructiveness directed at a particular object or individual. Common physical feelings include accelerated heartbeat, muscle tension, quicker breathing, and feeling hot.		
<b>Anxiety</b> – A general uneasiness that can be characterized by irrational fears, panic, tension, physical symptoms, excessive anxiety, worry, or fear.		
<b>Assertiveness</b> – The skills or effectiveness of clearly communicating one’s wishes. For example, the effectiveness with which a child refuses unreasonable requests from others, expresses his/her rights in a non-aggressive manner, and/or negotiates to get what s/he wants in their relationships with others.		
<b>Attention Problems</b> – Described by short attention span, difficulty sustaining attention on a consistent basis, and susceptible to distraction by extraneous stimuli.		
<b>Avoidance</b> – Behaviors aimed at escaping or preventing exposure to a particular situation or stimulus.		
<b>Cognitive-Intellectual Functioning</b> – Issues related to cognitive-intellectual ability/capacity and use of those abilities for positive adaptation to the environment. This includes efforts to increase IQ, memory capacity, or abstract problem-solving ability.		
<b>Community Involvement</b> – Issues related to the amount of involvement in specific community activities within the child’s day.		
<b>Contentment/Enjoyment/Happiness</b> – Refers to issues involving the experience and expression of satisfaction, joy, pleasure, and optimism for the future.		

<b>Depressed Mood</b> – Behaviors that can be described as persistent sadness, anxiety, or "empty" mood, feelings of hopelessness, guilt, worthlessness, helplessness, decreased energy, fatigue, etc.		
<b>Eating/Feeding Problems</b> – Knowledge or behaviors involved with the ingestion or consumption of food. May include nutritional awareness, food choice, feeding mechanics (e.g., swallowing, gagging, etc.), and social factors relating with eating situations.		
<b>Empathy</b> – Identifications with and understanding of another person’s situation, feelings, and motives.		
<b>Enuresis/Encopresis</b> – Enuresis refers to the repeated pattern of voluntarily or involuntarily passing urine at inappropriate places during the day or at night in bed or clothes. Encopresis refers to a repeated pattern of voluntarily or involuntarily passing feces at inappropriate places.		
<b>Fire Setting</b> – Intentionally igniting fires.		
<b>Gender Identity Problems</b> – Issues related with a youth’s self-concept or self-understanding involving gender roles and social behaviors in relation to their biological sex. This does not address self-concept issues involving sexual orientation, which would be coded as “other.”		
<b>Grief</b> – Feelings associated with a loss of contact with a significant person in the youth’s environment (e.g., parent, guardian, friend, etc.).		
<b>Health management</b> – issues related to the improvement or management of one’s health, inclusive of both physical illness and fitness. In addition to dealing with the general development of health-oriented behavior and management of health conditions, this target can also focus on exercise or lack of exercise.		
<b>Hyperactivity</b> – Can be described by fidgeting, squirming in seat, inability to remain seated, talking excessively, difficulty engaging in leisure activities quietly, etc.		
<b>Learning Disorder, Underachievement</b> – Refers to specific challenges with learning or educational performance that are not better accounted for by cognitive-intellectual functioning (#9) or general academic achievement (#1).		
<b>Low Self-Esteem</b> – An inability to identify or accept his/her positive traits or talents, and accept compliments. Verbalization of self-disparaging remarks and viewing him or herself in a negative manner.		
<b>Mania</b> – An inflated self-perception that can be manifested by loud, overly friendly social style that oversteps social boundaries, and high energy and restlessness with a reduced need for sleep.		
<b>Medical Regimen Adherence</b> – Knowledge, attitudes, and behaviors related to regular implementation procedures prescribed by a health care professional. Commonly include lifestyle behaviors (e.g., exercise, nutrition), taking medication, or self-		

administration of routine assessments (e.g., taking blood samples in a diabetic regimen).		
<b>Oppositional/Non-Compliant Behavior</b> – Behaviors that can be described as refusal to follow adult requests or demands or established rules and procedures (e.g., classroom rules, school rules, etc.).		
<b>Peer Involvement</b> – A greater involvement in activities with peers. Activities could range from academic tasks to recreational activities while involvement could range from working next to a peer to initiating an activity with a peer.		
<b>Peer/Sibling Conflict</b> – Peer and/or sibling relationships that are characterized by fighting, bullying, defiance, revenge, taunting, incessant teasing and other inappropriate behaviors.		
<b>Phobia/Fears</b> – Irrational dread, fear, and avoidance of an object, situation, or activity.		
<b>Personal Hygiene</b> – Challenges related to self-care and grooming.		
<b>Positive Family Functioning</b> – Issues related with healthy communication, problem-solving, shared pleasurable activities, physical and emotional support, etc. in the context of an interaction among multiple persons in a family relation, broadly defined.		
<b>Positive Peer Interaction</b> – Social interaction and communication with peers that are prosocial and appropriate. This differs from peer involvement (#26) in that it focuses on interactional behavior, styles, and intentions, whereas peer involvement targets actual engagement in activities with peers regardless of interactional processes.		
<b>Positive Thinking/Attitude</b> – This target involves clear, healthy, or optimistic thinking, and involves the absence of distortions or cognitive bias that might lead to maladaptive behavior.		
<b>Psychosis</b> – Issues related to atypical thought content (delusions of grandeur, persecution, reference, influence, control, somatic sensations), and/or auditory or visual hallucinations.		
<b>Runaway</b> – Running away from home or current residential placement for a day or more.		
<b>School Involvement</b> – Detailed description of amount of involvement in specific school activities within the child's scheduled school day.		
<b>School Refusal/Truancy</b> – Reluctance or refusal to attend school without adult permission for the absence. May be associated with school phobia or fear manifested by frequent somatic complaints associated with attending school or in anticipation of school attendance, or willful avoidance of school in the interest of pursuing other activities.		
<b>Self-Injurious Behavior</b> – Acts of harm, violence, or aggression directed at oneself.		



<b>Self-Management/Self-Control</b> – Issues related to management, regulation, and monitoring of one’s own behavior.		
<b>Sexual Misconduct</b> – Issues related with sexual conduct that is defined as inappropriate by the youth’s social environment or that includes intrusion upon or violation of the rights of others.		
<b>Shyness</b> – Social isolation and/or excessive involvement in isolated activities. Extremely limited or no close friendships outside the immediate family members. Excessive shrinking or avoidance of contact with unfamiliar people.		
<b>Sleep Disturbance</b> – Difficulty getting to or maintaining sleep.		
<b>Social Skills</b> – Skills for managing interpersonal interactions successfully. Can include body language, verbal tone, assertiveness, and listening skills, among other areas.		
<b>Speech and Language Problems</b> – Expressive and/or receptive language abilities substantially below expected levels as measured by standardized tests.		
<b>Substance Abuse/Substance Use</b> – Issues related to the use or misuse of a common, prescribed, or illicit substances for altering mental or emotional experience or functioning.		
<b>Suicidality</b> – Issues related to recurrent thoughts, gestures, or attempts to end one’s life.		
<b>Traumatic Stress</b> – Issues related to the experience or witnessing of life events involving actual or threatened death or serious injury to which the youth responded with intense fear, helplessness, or horror.		
<b>Treatment Engagement</b> – The degree to which a family or youth is interested and optimistic about an intervention or plan, such that they act willfully to participate and work toward the success of the plan.		
<b>Willful Misconduct/Delinquency</b> – Persistent failure to comply with rules or expectations in the home, school, or community. Excessive fighting, intimidation of others, cruelty or violence toward people or animals, and/or destruction of property.		

## Appendix D

### Child and Adolescent Functional Assessment Scale

#### CAFAS™ PROFILE : YOUTH'S FUNCTIONING

Youth's Name \_\_\_\_\_ ID# \_\_\_\_\_ Rater \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Site \_\_\_\_\_

Level of Impairment	Role Performance: School/Work	Role Performance: Home	Role Performance: Community	Behavior Toward Others	Moods/ Self-Harm: Moods/ Emotions	Moods/ Self-Harm: Self-Harmful Behavior	Substance Use	Thinking
SEVERE 30	1	41	66	88	116	142	154	182
	2	42	67	89	117	143	155	183
	3	43	68	90	118	144	156	184
	4	44	69	91	119	145	157	185
	5	45	70	92	120		158	186
	6	46	71				159	
	7	47	72				160	
	8	48					161	
	9	49					162	
	10	50					163	
	11						164	
MODERATE 20	12	81	73	93	121	146	165	187
	13	82	74	94	122	147	166	188
	14	83	75	95	123	148	167	189
	15	84	76	96	124		168	190
	16	85	77	97	125		169	191
	17	86	78	98	126		170	192
	18	87	79	99	127		171	
	19			100				
	20			101				
	21			102				
	22			103				
MILD 10	23	57	80	104	128	149	172	193
	24	58	81	105	129	150	173	194
	25	59	82	106	130		174	195
	26	60	83	107	131		175	196
	27	61		108	132			197
				109	133			
				110	134			
			111	135				
MINIMAL/NO 0	28	62	84	111	136	151	176	198
	29	63	85	112	137	152	177	199
	30	64	86	113	138		178	
	31			114	139		179	
	32				140		180	
	33							
	34							
	35							
	36							
	37							
	38							
39								
COULD NOT SCORE	40	65	87	115	141	153	181	200

For each scale: (1) mark the item number(s) which corresponds to those marked on the CAFAS™ form, (2) fill in the circle indicating severity level, (3) connect the circles.

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